

**“A STUDY TO ASSESS THE EFFECTIVENESS OF
LAUGHTER THERAPY IN REDUCTION OF STRESS
AMONG THE ELDERLY PEOPLE AT SELECTED
OLD AGE HOME AT CHENNAI”**

**M.Sc (NURSING) DEGREE EXAMINATION
BRANCH-V- MENTAL HEALTH NURSING**

**COLLEGE OF NURSING
MADRAS MEDICAL COLLEGE,
CHENNAI-03.**



A dissertation submitted to

**THE TAMILNADU DR. MGR MEDICAL UNIVERSITY,
CHENNAI-600 032.**

In partial fulfillment of the requirement for the degree of

MASTER OF SCIENCE IN NURSING

OCTOBER 2015

CERTIFICATE

This is to certify that this dissertation titled “**A STUDY TO ASSESS THE EFFECTIVENESS OF LAUGHTER THERAPY IN REDUCTION OF STRESS AMONG THE ELDERLY PEOPLE AT SELECTED OLD AGE HOME AT CHENNAI**” is a bonafide work done by **Ms.E.ELAMATHI**, College of Nursing, Madras Medical College, Chennai-03, submitted to the **TAMILNADU DR.M.G.R MEDICAL UNIVERSITY, CHENNAI**, in partial fulfillment of the university rules and regulations towards the award of degree of Master of Science in Nursing, Branch-V, **MENTAL HEALTH NURSING**, under our guidance and supervision during the academic period from 2013-2015.

Mrs.J.S.Elizabeth Kalavathy M.Sc.(N)
Principal,i/c
College of Nursing,
Madras Medical College,
Chennai-03.

Dr.R.Vimala, MD.,
Dean,
Madras Medical College,
Chennai-03.

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Approved by the Dissertation Committee on:

Research Guide

Mrs.J.S.ELIZABETH KALAVATHY M.Sc. (N) _____

Principal i/c,

College of Nursing, Madras Medical College, Chennai-03.

Clinical Specialty Guide

Mr.M. NITHYANANTHAM, MSc (N), _____

Lecturer,

Department of Mental Health Nursing,

College of Nursing,

Madras Medical College, Chennai-03.

Medical Expert

Prof.Dr. RANGANATHAN _____

Assistant Professor of Psychiatry,

Madras Medical College,

Chennai-03.

Statistics Guide

Mr.A.VENGATESAN, MSc, M. Phil, PGDCA, Ph.D., _____

Deputy Director of Medical Education (Statistics),

Directorate of Medical Education,

Chennai-10.

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ACKNOWLEDGEMENT

Most achievements are the results of many little things done in a single direction. I raise my heart in gratitude to all those who have been the guiding forces behind all my efforts.

I wish to express my sincere thanks to **Prof.Dr.R.Vimala, Dean,** Madras Medical College, Chennai -3 for providing necessary facilities and extending support to conduct the study

I extend my immense thanks and gratitude to **Mrs.J.S.Elizabeth Kalavathy M.Sc. (N),** Principal-in- charge, College of Nursing, Madras Medical College for her support and encouragement which enabled me to accomplish this study.

It is my pleasure, privilege, heartfelt gratitude and indebtedness to my esteemed teacher **Dr.Lakshmi M.Sc. (N), Ph.D.,** for her valuable and expert guidance, thought provoking stimulation, encouragement, motivation and support for me to the successful completion of this dissertation.

I render my deep sense of sincere gratitude to my teacher **Mrs.Vijayakumari MSc (N).M.Phil.,** to her timely assistance and guidance in pursuing the study. It's my pleasure to thank my Guide **Mr.Nithyanantham, M.Sc.(N),** Lecturer in Mental Health Nursing, College of Nursing, Madras Medical College for his sincere efforts towards the study and also for his guidance, suggestion, and encouragement in helping me to carry out this study.

It's my duty to convey thanks to all the experts **Mr.Ranganathan, Assistant Professor of Psychiatry,** **Mr.Sudhakaran, Clinical Psychologist** and **Mrs.Grace Samuel,**

Professor of Mental Health Nursing who validated the research tool and guided me with valuable suggestions and corrections.

I am immensely grateful to **Mr.A.Vengatesan** who has helped me in data analysis and statistical scoring that helped in calculating the effectiveness of the research study.

I extend my heartfelt thanks to **Dr.MadhanKataria** who is the founder as well as the master of Laughter Therapy and also to **Mr.Kannan** who offered training and certificate to me

I thank to **The Founder of KaakkumKarangal Old Age Home**, Thiruvananthapuram, Chennai who gave me permission and support to conduct the study.

I express my thanks to **all the Faculty Members** of the College of Nursing, Madras Medical College, Chennai-3 for their support and assistance to complete this study. It's my response to thank our Librarian **Mr.Ravi M.A.M.L** for his support in my research study.

I am deeply obliged to **The Participants** for sacrificing their valuable time and extending their kind cooperation to provide data and laughter therapy practices.

I would like to express my affectionate and sincere thanks to my beloved husband **Mr.Manimaran** and my daughter **M.Magizhini** for his love, prayer, constant support, inspiration and encouragement throughout my research study and I acknowledge with gratitude and devotion to my father in law **Mr.Rajendiran** for his abiding grace, compassion and blessing me which gave the strength and courage to overcome the difficulties in completing the study.

I extend to my thanks to **Mr.Shajee Computers** and **Mr.Ramesh**, for their help in D.T.P printing, binding and completing the dissertation work in successful manner.

Once again I thank The Lord Almighty for his blessings, wisdom and direction. My warm appreciation goes to all my family members, friends and colleague whoall have helped me directly or indirectly to complete this study.

ABSTRACT

BACKGROUND OF STUDY

Stress is defined as the physiological or psychological tension that threatens homeostasis or a person's psychological equilibrium. It refers to the disturbances in physical, emotional and psychological well-being of the elderly people. If the stress is not treated initially, it may lead to many complications like depression, suicide etc. Laughter therapy aims to get people laughing in both group and individual sessions and can help to reduce stress, make people happier and more committed, as well as improve their interpersonal skills.

TITLE

This study is aimed to assess the effectiveness of laughter therapy in reduction of stress among the elderly people at selected old age home at Chennai. The research design used was pre experimental one group pretest and posttest design.

METHODS

The sample was selected by non-probability convenient sampling technique (n=60) and pre-existing level of stress among the elderly were assessed by structured questionnaire. After pre-test, laughter therapy was practiced with elderly people. On the 14th day post-test was done by using the same questionnaire. After 4 weeks of laughter therapy, the levels of stress among the elderly people were analyzed by student paired "t" test.

RESULTS

The results on post- test showed significant reduction of stress ($p=0.001$) in score. The overall pre-test stress score among elderly people was 62.6% whereas in post-test it was 29.9%. So the significance difference between pre-test and post- test stress score is 32.6%.

CONCLUSION

The above finding revealed that laughter therapy was effective and helped the elderly people to reduce their stress level.

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LIST OF ABBREVIATIONS

S. No	Abbreviation	Expansion
1.	DASS	Depression Anxiety stress scale.
2.	OAP	Old age pension
3.	X ²	Chi square test
4.	CI	Confidence interval
5.	SD	Standard deviation

CHAPTER – I INTRODUCTION

“Always laugh when you can, it is cheap medicine”

- Lord Byron (2010)

At a Global level, especially in the developed world, population of the elderly more than 65 years is growing at a faster rate compared to other classes of people below 65. The responsible factor is more connected with increase in life expectancy and decline in number of children being given birth to in a year. (*Plank et.al.2009*).

Meanwhile as people age, they experience some kind of changes or decline in health status which means that as age related changes set in. The elderly become challenged health wise and coping will be the only tool to move on with life. (*Birkeland&Natvig 2009. P25*).

The term aging has gained lot of attentions over the years as the population of the elderly people keeps. According to Hasberg (2008 p.17) “Aging is defined to mean periodic change in human life which means man and the conditions, he is subjected to are constantly changing as time passes.’ The elderly could be retired to as people that are older than 60 years; some people set it to be person at his or her 70 years of age are older. (*Kotkampmothes et al 2005*). Therefore old age could be described as a period in life of a man when he cannot adapt properly to what he had previously adapted to. (*Toner et al 2003*).

It defines stress as "any uncomfortable emotional experience accompanied by predictable biochemical, physiological and behavioral changes" (*The American Psychological Association (APA) 2010*). When man faces a condition in which he begins to lose functional parts of his body and begins to go through challenges, there is tendency for stress to set in. According to Bitlner et al 2011 Stress occur when the affected

person has less resources to overcome the challenging situation he find himself and there is less probability of effective coping skills. Dysvik et al 2005 pointed out that stressors are referred to as threat to general body well-being which results to emotional disturbances. They further defined psychological stress as a situation in which man finds himself in an immediate surrounding that he could not manage his health and it is placed at risk due to inability to control the situation.

Stress is an important factor when it comes to ageing. Stress puts man at risk of going through ageing process while age also puts man at risk of stress in other way round (*Pardon 2007*). When the level of stress goes up it has negative impact on sight but this problem can be easily regained if the stress is later overcome. (*Biltner et al 2010*).

According to *Watkins et al (1999)* Chronic stress and immune system are inter related when it comes to general wellbeing of the body, though it depends partly on the individual nature but chronic stress worsens the state of immune system. And also relationship between stress and ageing is so complex to define but ability to cope with stress determines how successful the ageing would be. (*Pardon 2000*)

Laughter is a physical reaction in humans and some species of primate, consisting typically of rhythmical, often audible contractions of the diaphragm and other parts of the respiratory system. It is a response to certain external or internal stimuli. (*BERK LS, Tan SA, Fry WF, Napier BJ, Lee JW, Hubbard R (January 2009)*).

Laughter is a part of human behaviour regulated by the brain, helping humans to clarify their intentions in social interaction and providing an emotional context to conversations. It is used as a signal for being part of a group, it signals acceptance and positive interactions with others. Laughter is the best relaxant as even one minute of laughter

can give the body an effect of 45 minutes of therapeutic relaxation and 10 minutes of laughter is enough for the effect to last throughout the day. (*French –Neurologist –Henri Ruben stein*)

Laughter therapy is the use of humor for the relief of physical or emotional pain and stress. It is used as a complementary method to promote health and cope with illness. It can reduce stress and enhance person's quality of life. (*Charlie Chaplin, Buster Keaton, Harold LIO*). It has more clinical benefits and also Laughter Therapy promotes many physiological changes in our body.

In mental disorder, Stress is the major important factor which affects the majority of elderly people. Geriatric psychiatry is concerned with preventing, diagnosing and treating psychological disorders in elderly adults. It is also concerned with promoting longevity; persons with healthy mental adaptation to life and to live longer than that stress due to emotional problems. There are many psychotherapies and psychopharmacologies available for the management of stress but the laughter therapy is the best for all. It produces an amazing positive effect in the human body which is a self-help therapy and cost nothing which can be done anywhere and also improve the social skills of the individuals who involve in it.

1.1. NEED FOR THE STUDY

“The world we have created is a product of our thinking: it cannot be changed without changing our thinking”.

-Albert Einstein (2003).

The Disengagement Theory 2015: Psycho Social theory and concepts propose explanations for the distinctive relationships between old people and their societies. It proposes that old age has mutual disengagement between people and their society due to anticipation of

death. By becoming disengaged from work and family responsibilities, people are enabled to enjoy their old age without stress. This theory has been subjected to the criticism that old age disengagement is not natural, inevitable, nor beneficial furthermore, disengaging from social ties in old age is not across the board: unsatisfactory ties are dropped and satisfying ones kept.

Old age statistics by World health organization (2015) an estimated, worldwide 121 million people were currently suffers from stress.

- ❖ In India, there are 76 million elderly people constituting 7.7% of the total population. With current demographic trends it is estimated to reach 21% by the year of 2050.
- ❖ In this, male are 27258259 and female are 30,031,289 (2014). It would be projected to increase 17.3 core in 2026. The life expectancy has increased from 24 years in 1900 to 42 years in 1960 and 53 years in 1971 to 58 years in 1981. It is projected to reach around 70 years by 2025.
- ❖ According to statistical info (2015), In Tamil Nadu, elderly population approximately 77 million in census 2001. Old age dependency ratio will go up from 13 % in 2000 to 32.8 % in 2050. In Chennai 4.36 to 7.81 % increased elderly population.

Stress becomes a significant part of the health care environment. While many traditional stress management techniques may be effective. Laughter is a naturally occurring phenomenon and it helps us make sense of understand and cope with reality as serves as nature's bio feedback and stress control system. It plays an important role in stress management and it should be recognized and encouraged.

Laughing is an excellent way to reduce stress in our life and can help to cope and survive with stressful lifestyle. Laughter provides a full-scale workout for our muscles and unleashes a rush of stress-busting endorphins. Since our bodies cannot distinguish between real and fake laughter, anything else that makes a positive impact. One does not need to be happy or have a sense of humor.

Laughter therapy includes six things as follows deep breathing exercises, Rhythmic clapping, ho-ho-ha-ha-ha chanting, child-like play, laughter exercises and closing technique. Laughter comes from the body not the mind. When you take part in laughter therapy, you get a release of endorphins, giving you a "feel good" factor; the whole body relaxes and stress is reduced. You also get an effect of aerobic exercise. Laughter tones your muscles, improves your respiration and also your immune system is boosted which helps to resist the disease.

According to a journal of Tulin research and Human genetics 2009: Positive correlation were found between the positive humor styles and all the mental toughness factors which are comprised to challenge the confidence of abilities, commitment control over life, emotional control and interpersonal confidence.

A report of Tina Dayton relationship trauma to resilience and balance (2010): Our brain actually process laughter to produce mood lifting brain chemicals. Laughter causes our body to release a bulk of serotonin and feels good. It reduces least four of neuroendocrine hormones associated with the stress response like epinephrine, cortisol, dopamine and growth hormone.

According to the Journal report of SMILE (The Sydney Multisite Intervention of Laughter Bosses and Elder clowns) 2010: Laughter therapy is a non-pharmacological intervention with potential to

improve mood and quality of the life for institutionalized elderly persons including those with dementia. The primary aims of the SMILES are to examine the effects of laughter therapy on resident's mood, quality of life, social engagement and agitation.

A study conducted by Lee beck 2010: Showed that laughter can find out many of the physiological effects of stress caused by the hormones like cortisol and epinephrine. These hormones trigger a cascade of physiological response that includes increased blood pressure, heart rate, blood glucose and energy available to the brain and muscles.

According to a study conducted by Chen-lei-et-al (2007) It stated that the aging process typically result to decline the physiological functioning and to increases the incidence of chronic health problems that could lead to various levels of functional dependency especially elderly people who are in a transitional frail state of health with multiple chronic illness and mildly functional dependency. It is essential to reduce health care expenditure in this large group aging population. Avoiding a sedentary lifestyle is one of the ways to enhance the physical fitness of the elderly and to delay the health deterioration.

A report of researchers at the University of Maryland Medical Center (2005): It shows that the fact which the laughter causes the dilatation of the inner lining of blood vessels and increases blood flow. Drs. Michael Miller (University of Maryland) and William Fry (Stanford), theorize that beta-endorphin like compounds are released by the hypothalamus. It activates the receptors on the endothelial surface to release nitric oxide and resulting in dilation of blood vessels. Other cardio protective properties of nitric oxide include the reduction of inflammation and decreased platelet aggregation.

A study conducted by Tagore on 2000 : Found that people with heart disease were 40 percent less likely to laugh and be able to recognize laughter in a variety of situation. It also boosts the number of antibody-producing cells and enhances the effectiveness of T-cells which leads to a stronger immune system when compared to the people of the same age without heart disease.

According to a new study from Loma Linda University conducted by Singh Dr. Gurinder Baines 2012: It is well known when increased stress can negatively affect the health status. Medical News Today recently reported on a study suggests that the stress may worsen allergies. While other research indicates that it makes the brain more susceptible to mental illness. University in California finds that humor may reduce brain damage which is caused by the "stress hormone" like cortisol which turns to improve the memory.

According to a study conducted by author Dr. Lee Burk 2000: Suggest that the less stress improves the memory performance and humour. It may be the key to reducing the stress levels. Laughter reduces the detrimental stress hormones like cortisol that decrease memory hippocampal neurons, lowers the blood pressure, and increases blood flow and mood state". He explains that "The act of laughter or simply enjoying some laughter which increases the release of endorphins and dopamine in the brain. It provides a sense of pleasure and reward." He says that these neurochemical changes in the brain lead to increase "gamma wave band frequency," which can improve memory.

According to a report of Journal of the American Medical Association 1984: Although there is no known 'laugh center' in the brain its neural mechanism has been the subject of much albeit, inconclusive and speculation. It is evident that its expression depends on the neural paths which arise the close association with the telencephalon

and diencephalon centers. It concerned with respiration and Aepidemiological study conducted by German psychologist&Dr.Michael Titze report that in 1950's people used to laugh 18 minutes a daybut today not more than 6 minutes/day despite the huge risk in the standard of living.

As per the old proverb says ***“Laughter is the best medicine”*** laugh can make miracles. Today in their mechanical life, every individual is full of stress and tension both at home or Old Age Home. They have no time to laugh; their mind is always occupied with other ideas. When you meet socially, you can be happy and can maintainrelationship with other people. Therefore Laughing can be a good form of helping other people is happy too.

A study shows that the number of times a person laughs reduces from stress 400 times to 17 times between a preschool age and adulthood. But being an aware of the benefits of laughter you can reduce the stress by trying to laugh more often during the day.

1.2. STATEMENT OF THE PROBLEM

“A study to assess the effectiveness of Laughter Therapy in reduction of stress among elderly people at selected Old Age Home at Chennai”

1.3. OBJECTIVES

The study's objectives are

- 1) To identify the socio demographic variables of the elderly people
- 2) To assess the pretest level of stress before laughter therapy intervention.
- 3) To assess the posttest level of stress after laughter therapy intervention.
- 4) To evaluate the effectiveness of the laughter therapy intervention

- 5) To associate the effectiveness of laughter therapy with selected demographic variables.

1.4. OPERATIONAL DEFINITION

Assess

It is an organized, systematic and continuous process of collecting data from elderly people having stress.

Effectiveness

It refers to determine the extent to which the laughter therapy intervention has achieved the desired outcome as measured by DASS scale. It is reduced in posttest stress score

Stress

It means any uncomfortable emotional experience accompanied by predictable biochemical, physiological and behavioral changes of the elderly people measured by structured standardized stress scale.

Laughter Therapy

Laughter therapy is considered to be useful, cost-effective and easily accessible intervention with six steps of deep breathing exercise, rhythmic clapping, ho-ho- ha-ha-ha chanting, laughter exercise, playful laughter techniques and closing technique.

Elderly People

It refers to the elderly people between the age group of 60 to 70 residing at selected old age home at Chennai.

Old Age Home

It is a social organization set up which take care of especially orphaned elderly people and widowed etc.

1.5. HYPOTHESIS

H1: There will be statistically significant difference between pre-test and post-test level of stress scores among the elderly people.

H2: There will be statistically significant association of the post test scores with their selected socio demographic variables.

1.6. ASSUMPTION

The researcher assumes that

- ❖ The Elderly people will have stress during the stay at old age home.
- ❖ The Elderly people will be reduced stress by adopting laughter therapy.
- ❖ The Elderly people have minimal stress regarding stress reduction techniques.

CHAPTER-II

REVIEW OF LIERATURE

‘When you laugh, you change, and when you change, the whole world changes.’

- Dr. Kataria.

Literature review is the activities involved in searching for information on a topic and developing a comprehensive picture of the state of knowledge in that topic *Polit and Beck (2009)*.

An extensive review of literature relevant to the research topic is done to gain information and insight to build the foundation of the study. The literature reviewed for the present study is organized and presented under the following headings.

Section-A: Literature related to incidence and prevalence of stress among elderly.

Section-B: Literature related to effectiveness of laughter therapy.

Section-C: Literature related to effectiveness of laughter therapy on stress.

2.1. Literature related to incidence and prevalence of stress among elderly

Jariwalavishall (2012) conducted a cross sectional study on the elderly people belonging to different socioeconomic and varying demographic groups of Surat city. A total of 105 elderly people were interviewed comprising of 35 people each from the elderly living in old age home, in the affluent areas and if those living in slums of city. A probability sample was obtained by approaching all the subjects in a consecutive manner. The prevalence of stress was moderately high 39.04% among the elderly in their study population and it was observed

that several important socio demographic variables had shown a significant association with stress in the elderly as follows 46.67% of elderly age group between 55- 65 years, 70% of them were female, 83.34 % of them belongs to Hindu, 63.34% of elderly had higher secondary, 66.7% of them were married, 80% of people from nuclear family and 23.33% of them was pensioner. The study revealed that there would be 6% to 50% prevalence rates on stress in the elderly community samples of the elderly in India.

Nilamadhabkara and Anku Barua (2010) investigated a study to compare stress disorders in elderly adults and younger adults with major stress disorders and psychotic features. It was a cross sectional study of 250 persons in which 142 was above 60 years and 117 were within 18-59 years. The investigator assessed that the elderly adults has 73.3% of major stress disorder and 26.7 % of psychotic features whereas the young adults has 50.9% of major stress disorder and 49.1% of psychotic features. The findings of the study were consistent with those of community based epidemiologic survey that stress disorders are as much as prevalent in elderly adults than younger adults.

F.A. McDougall (2009) conducted a study to determine the prevalence of stress and the influence of demographic characteristics of the symptoms in the elderly people residing in rural Taiwan. And also the association was explored between stress disorders and life stressors in the Taiwanese elderly people. Stress inventory (TESI) was used as a tool. A cross sectional design utilizing face to face administration of tool was made. A total of 195 elderly community residents participated in this study. Levels of stress were measured by stress inventory and 57% of the subjects scored 7 indicators that the majority has severe stress.

Nandi et al (2008) epidemiological survey revealed that rural population in Calcutta found that 24.1% of subjects are aged between 60

and above suffered with stress. Ramachandran(2008) in a Gero psychiatric community survey in a sub urban population near Chennai found that 24% of the community people suffered with stress and that is the most common psychiatric disorder in the elderly people. Venkoba Rao et al 2008 in their Gero psychiatric morbidity survey in a semi urban area of Coimbatore found that depressive illness contribute to 67% of the total psychiatric morbidity in the elderly population.

Patty Pits (2008) conducted a study to assess the stress level among elderly people. 55 elderly people included in this study. It shows that more than 70% of illnesses related to stress including high blood pressure, heart diseases, depression, anxiety and psychosomatic disorders. The treatment of mind related diseases is aided by the earliest form of meditation. Many studies show that stressful life situations generate changes, complexities and challenges to which the individual cannot respond adequately. Finally it leads to illness. To get relief from stress, number of interventions was carried out. Among these laughter is considered as the best one as it needs no specific preparation.

2.2.Literature related to effectiveness of laughter therapy

Chi Young (2012) investigated a study on the effects of laughter therapy on depression; cognition and sleep among community dwelling elderly. Totally 109 subjects aged over 65 years were involved in this study. Among these 48 subjects were in laughter therapy group and 61 subjects in control group. GAS (Geriatric Depression Scale) was used as tool. Laughter therapy was practiced daily 30 minutes morning and evening session upto 15 days. Post test depression score of laughter group is 26.6 % and control group is so 73.3%. So the study concluded that laughter therapy was considered to be useful, cost effective and

easily accessible intervention and it has positive effects on depression, insomnia and quality of sleep in the elderly people.

Hye Sook Shin (2011) conducted a study to examine the effects of laughter therapy on postpartum fatigue and stress responses on postpartum women. Totally 67 postpartum women were selected by convenience sampling (experiment group-33 and control group-34). The experimental group received laughter therapy from the laughter therapy expert for 60 minutes per day and twice a week for two weeks for 4 sessions. They evaluate effectiveness of laughter therapy on postpartum fatigue by self-report questionnaires' and cortisol concentration in breast milk. The post test score of the experimental group was 28.6% and cortisol concentration has changed and control group score was 60% and there is no remarkable change in cortisol level. So this finding provided evidence that the use of laughter therapy as an alternative measure can be used to reduce postpartum women's fatigue.

Hirsch RD and et al (2010) conducted a study on laughter therapy in the elderly with stress. 120 samples were selected by purposive sampling technique (Experimental group 60, control group 60). UN conditional laughter session was conducted for 2 weeks. It shows significant improvements only in the experimental group for resilience and satisfaction with life ($p < 0.05$). Analyses of the subgroups with at least medium to severe stress showed further significant effects for cheerfulness, seriousness, bad mood, and satisfaction with life ($p < 0.05$). These severely affected patients seemed to profit best from laughter therapy. The results indicate the efficacy of this laughter therapy intervention for elderly depressed patients.

Dane Taylor (2009) assessed a qualitative study to examine the workers who were using humorous coping skills. 200 samples were selected by convenient sampling technique. Open ended interview was

used to document the uses of humour. 89.5% of the them were using various humorous coping skills. Humour was identified as an important factor which improves the coping skill among elderly and it also improves the self-esteem and reduces the psychological symptoms related to stress. The use of humour is a coping mechanism to modulate the impact of stressful events on mood status and to improve the ability. It has been documented and analysed among workers.

Stanley et al (2008) conducted a controlled study over the 100 elderly people in the selected community area that shows the experience of laughter therapy for 4 weeks which lowers serum levels, increases the amount of activated T lymphocytes, increases the amount of activity of natural killer cells and increases the number of T cells. In short, laughter therapy stimulates the immune system and offsetting the immune suppressive effects of stress.

Bedeman Regier et al (2007) conducted a study showed that daily laughter sessions significantly improve the work performance. A group of 33 employees in behavioural health centre were laughed together daily for 15 minutes up to 15 days. Researchers measured self-efficacy and other 12 characters. After the laughter therapy session, self-competency scores doubled, relational competencies increased by almost 50% and role competency also doubled.

Herbert Lefcourt (2006) investigated a study which explored the possibility of sense of humour and its use can change our emotional response to stress. A sample size of 50 elderly people was selected by random sampling technique. Here the subjects were asked to review the frequency and severity of stressful life changes occurred to them over the previous six months and their recent negative mood disturbances were evaluated. He administered test to evaluate the use of humour and

perception of humour. \ finally found that humour can buffer the mood disturbances which occur in response to negative life events.

Kataria (2005) who conducted a study showed that Laughter Therapy daily for 15 minutes keeps one fresh throughout. Nobody can escape is contagious. Totally 60 samples were selected by convenient sampling technique. From that 40 elderly people (80%) were determined that sense of humour might act as a moderator of daily stress. The study result shows that laughter therapy leads to the development of confidence and leadership qualities as well as communication skills. Humour contributes greatly to a feeling of wellbeing. Stress and strain of modern life is taking a heavy toll on the human mind and body. Laughter therapies provide better sleep and reduce depression and prevent people with suicidal tendencies and made them living with more hope.

Narayanan (2004) who conducted a controlled study on combined Laughter Yoga with Cognitive Restructuring among patients suffering from stress, diabetes, asthma, depression and high Blood Pressure. Self-structured questionnaire was used as a tool. The laughter yoga was practiced daily 30 minutes up to 4 weeks. The results showed that 50% reduction in Stress levels, Depression, Diabetes and Blood Pressure among some of the participants. Because Laughter therapy improves the lung capacity and oxygen levels in the blood.

Donald (2003) who investigated a study found that increases antibodies in the mucus membrane of the nose and respiratory passage after laughter therapy. They assessed nearly 35 nursing home patients staying in the somatic ward of 10 nursing homes in the North India. The laughter session was conducted daily two times, 45 minutes up to 4 weeks. The result shows that the frequencies of cold, throat and chest infections got reduced. Since laughter improves the level of endorphins which are natural pain killers in our body. It helps to reduce

the intensity of pain from arthritis, spondylitis, cancer and migraine and also improves lung capacity and oxygen level in the blood.

Johnson Garden, (2001) conducted a study that laughter and happiness in the daily lives of recently bereaved spouses in University of Utah, Salt Lake City. A sample size of 292 recently widowed (5-24 weeks) men (39%) and women (61%) with the age group of 50 and over examined both the perceived importance of actual experience of having positive emotions in their daily lives and how they might impact bereavement adjustments. The positive psychology movement was created more interest in examining the potential value of experiencing positive emotions during the course of bereavement. The researcher found that most of the bereaved spouses rated to humour and happiness. As being very important in their daily living, they were also experiencing humour. Laughter and happiness strongly associated with favourable bereavement adjustments (lower grief and depression) regardless of the extent to which the bereaved person valued having these positive emotions

Seaward BL (2000) revealed on the basis of the study on Humor's healing potential has revealed a complex psychological phenomenon. Sense of humor has been categorized in types associated with personality. Humor has many styles and can be found in almost any situation or any occasion. Laughter has many clinical benefits which promoting beneficial physiological changes and overall sense of well-being. Humor has long-term effects that strengthen the effectiveness of the immune system. In healthcare, humor therapy can help to relieve stress associated with disease and illness. It serves as a diversionary tactic and therapeutic tool for disorders such as depression and also coping mechanism. It is also a natural healing component for care givers

who are trying to cope with the stress and personal demands of their occupations.

2.3.Literature related to the effectiveness of laughter therapy on stress.

Dalbirkaur (2014) conducted a study on laughter therapy among elderly people with stress. It is observed in pretest of experimental group 1 (3.3%), 0, 29 (96.66%) subjects' falls in mild, moderate, severe stress respectively. Control group has 1 (3.3%), 2 (6.6%) and 27 (90%) mild, moderate and severe level. In posttest, there was no decrease level of stress among control group 1 (6.6 %) moderate, 29 (96.66 %) severe whereas elderly people increased in moderate 16 (53.33 %) and mild 9 (30 %) as compared to pretest of experimental group after laughing session 20–25 minutes daily for 15 days. Only 5 (16.6 %) elderly people remained in severe stress after laughter therapy. It shows that shifting of samples in various level of stress due to laughter therapy in experimental group only.

Brescia University of Western Ontario (2012) a study was assessed on humor as a coping of stress. A sample size of 44 female university students was selected by using random sampling technique. The tools are coping humor scale, ways of coping scale, Perceived Stress Scale (PSS) and Dysfunctional Attitudes Scale. Approximately all students' actual performance on the first exam was slightly below the initial expectation. The study results showed that the main effects of hoping humor remained significant after accounting for actual expected performances discrepancies incremental $F(1,41) = 5.57, p < .025$. Higher humor scores were associated with increased use of emotional distancing techniques are assessed by the distancing subscale of the ways of coping measure. ($r = .27, p < .05$). Those individual scoring high on the coping humor scale also indicated greater use of confronted coping stargies ($r = .32, p < .025$) Thus in attempting to cope with

academic evaluations , high humor individuals dealt with these stressful situations in more direct fashions.

Stacy.R.Freiheit et al (2010) conducted a study to find out the effectiveness of laughter therapy on stress among high school students. Sample consisted of 72 students of cultural community of Tehran were chosen by purposive sample technique. The Tension and Effort Stress Inventory (TESI) was used as a tool. Randomized pre and post-test controlled group research design was used. Life satisfaction scale pretest and demographic were administered before laughter therapy. The laughter therapy was given daily 30 minutes up to 4 weeks. 60.8% of stress was reduced after laughter session. This finding showed that laughter therapy had effects on reducing stress among high school students.

Mimi. M.Y.Tse et al (2010) conducted a study to determine the effectiveness of laughter therapy on relieving chronic stress and enhancing happiness among adolescents. Sample consisted of 70 adolescents (36 adolescence in experimental group and 34 in the control group). It was a quasi-experimental pretest posttest controlled design. 8 weeks of laughter therapy programme (experimental group) in another school were treated as a control group. The posttest stress score of experimental group was 28.5% and control group score was 80.1 % . The results show that use of laughter therapy appears to be an effective non pharmacological intervention for the significant reduction of chronic stress and increase happiness.

Klatt M.D (2009) conducted a study to assess the effectiveness of laughter therapy among 50 individuals employed in various occupations in Iran. Individuals are divided as 15 workers, 15 managers, 9 guardians, 5 dentists, 6 teachers. Stress inventory was used as a tool. Laughter therapy was provided for 30 minutes daily. After each session they are

asked to continue in work environment. The post-test stress was 20.7%. These results showed that there was a great relief from the stress after laughter therapy.

Laughter Yoga International (2006) investigated a study which focused on measuring changes in stress level before and after 3 weeks of unconditioned laughter sessions. It was done for the 120 staffs who are working at 3 separate IT companies. Researchers carefully measured physical, psychological and emotional indicators of stress. The stress was assessed by structured scale. The laughter group showed a significant decrease in stress level (63.7%) reflected in decreased heart rate (23.1%), low blood pressure (15.4%), reduced cortisol levels (50.5%) and 11% decrease in perceived stress levels. Other indicators confirmed that all participants showed significantly lower stress level after 3 weeks of laughter sessions.

Fabiola M. Mathew (2003) conducted a study to assess the value of humour in current nursing practice. Totally 250 nursing staffs were selected from 3 various nursing homes. Use of laughter therapy in nursing practice helps to relieve the stress that associated with low pay offered, intermittent shortages of nurses, high staff turnover, work overload and additional stresses associated with workplace. A hearty laugh can break down the barriers of embarrassment and improve the coping mechanism. In post-test; there was remarkable reduction in stress level (48.5%). This result shows that laughter therapy helps to overcome the job related stress.

Labott Tall (2000) assessed a study among 33 healthy adult women who were divided into 2 groups (Experimental-17 controls-16). Experimental group watched humorous video while control group viewed a tourism video. All participants were completely questioned regarding their stress and humour level before and after watching the videos. The

post test score of experimental group was 30.5% and control group was 60.5%. The study result showed that compared to control group, the laughter group reported a significant decreased in stress following treatment. Their stress level appeared inversely co-related with their level of mirthful laughter.

2.2. CONCEPTUAL FRAMEWORK

Conceptual framework deals with concepts assembled together by virtue of their relevance to research problem which provides a certain frame of reference to clinical practice, research and education. The framework gives direction for planning research design, data collection and interpretation of findings.

BETTY NEUMANN'S HEALTH CARE SYSTEM MODEL.

The present study was intended to find out effectiveness of laughter therapy in reduction of stress among elderly people. The conceptual framework is based on Betty Neumann's health care system model. According to this model affords a total person approach (or) holistic client approach by providing the multidimensional view of a person as an individual. This model includes holistic client approach, open system, basic structure, environment, and stressors, line of defense and resistance, degree of reaction, three levels of prevention as intervention. Holistic client approach mainly focuses dynamic and constant interaction between client and environment. Betty Neumann's model focuses on stress and stress reduction is primarily concerned with the effect of stress on health.

BASIC CORE STRUCTURE

According to the Neumann's model the person has core circle consisting of basic structures. These basic structures encompass the factors necessary for client survival. These factors also includes

physiological, psychological, sociocultural, developmental and spiritual variable. Surrounding the basic core structure is concentric circle, which includes the line of resistance and line of defense. A solid line which is outside of the Line of Resistance is called Normal line of defense. It is an equilibrium state or the adaptation state that a client can make some adjustment to overcome the stressors. Flexible line of defense is a broken line which is outside of the Normal line of defense. It acts as a protective barrier to prevent stressors. It is dynamic and can change rapidly over a short time. The series of lines surrounding the basic core structure is called Line of resistance. It represents the internal factors of the person that helps defend against stressors. The degree of reaction is the amount of system instability occurs after the exposure to stressors. Neumann describes stressors as any environmental force and it include tension producing stimulus that has the potential to affect a person's normal line of defense. According to Neumann's there are some specific interventions like primary, secondary and tertiary prevention which is used to retain or maintain system stability.

ASSESSMENT

The internal and external forces can affect the client at any time which is considered as environment. It includes intrapersonal, interpersonal and extra personal factors. Stressors are any environment force that alters system stability. A person's reaction to a stressor is determined by natural and learned resistance which is manifested by the strength of the lines of resistance and the normal and flexible line of defense.

In this present study elderly people is viewed as an open system that is influenced by various stressors like age, marital status, religion, financial support, occupation, number of children, duration of stay etc. The elderly people is changing life style, family stress and emotional stress are considered as their environment. In the flexible line of

defense, elderly people take the life changes as normal phenomenon. In the normal line of defense, elderly people try to use coping mechanism to adjust with stressful situation. Elderly people again possess a line of resistance which attempts to stabilize the individual according to the ability to cope up with the problems. But when the stressors cross through the line of resistance due to the intensity, it may alter the basic structures and shows various stress reaction.

INTERVENTION

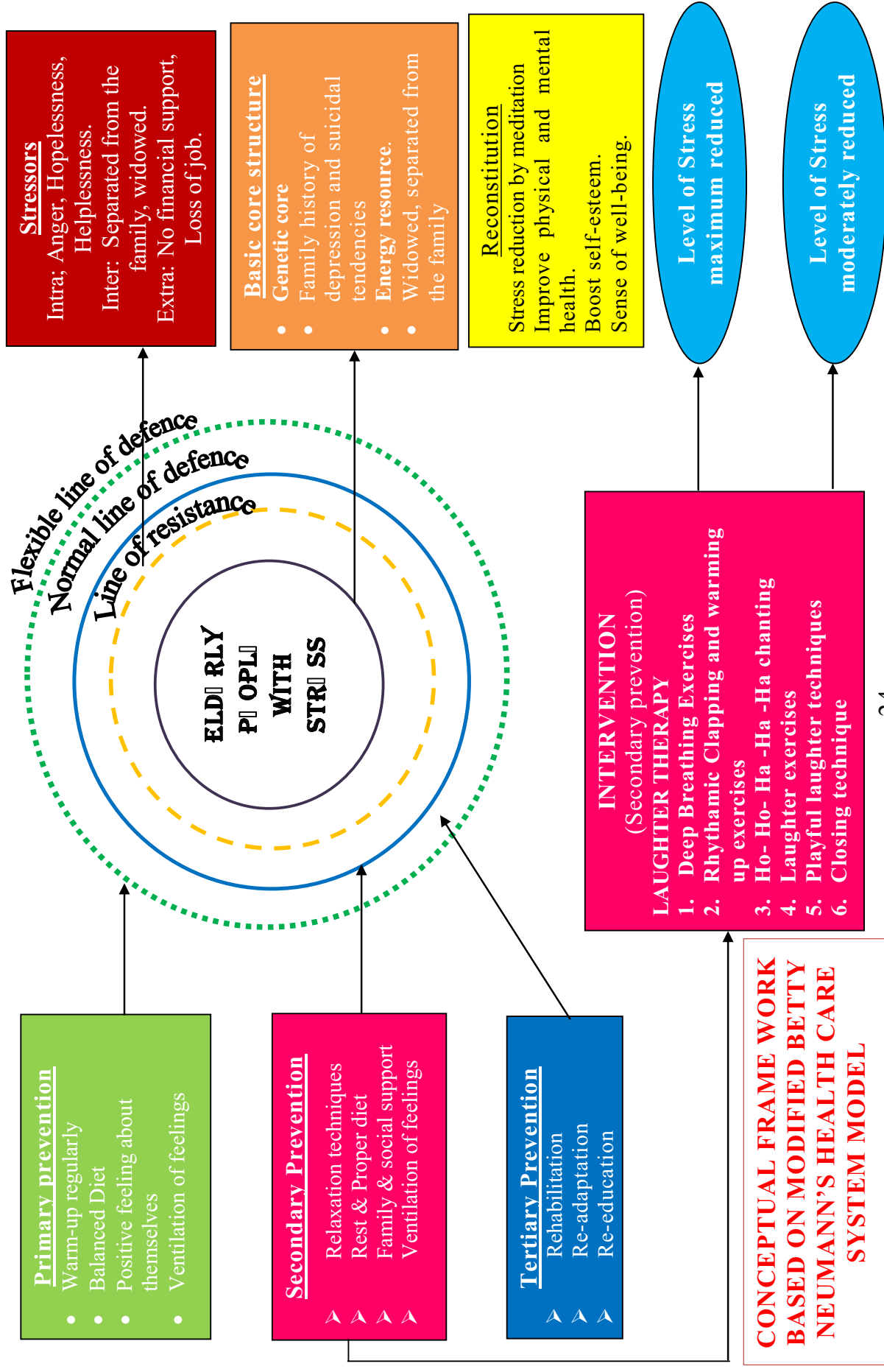
The goal of nursing is to keep the person healthy and stable. Specific interventions like primary, secondary and tertiary prevention are used to retain or maintain system stability. Primary prevention includes exercise regularly, relaxation, ventilation of feelings, proper diet, social support, maintain positive feeling about us. Secondary prevention includes stress reduction by relaxation techniques, exercises, rest and proper diet, family and social support, ventilate the feelings. Tertiary prevention includes rehabilitation like re-adaptation and re-education to prevent future occurrence and maintenance of stability. In this study the practice of laughter therapy is one of the relaxation techniques which are used as secondary prevention for reducing level of stress.

EVALUATION

It is the end product of a system as a result of its process; it refers to decrease or maintain the stress among the female elderly and measured by posttest.

RECONSTITUTION

It is a state of person system to adapt the stressor is called reconstitution. It includes stress reduction by meditation, improving physical and mental health, boosting self-esteem and sense of well-being.



CHAPTER-III

3.1. METHODOLOGY

'The human race has one really effective weapon and that is laughter'

- Mark Twain

Research methodology is way to systematically solve the research Problem. It is a science of studying how research is done scientifically.

- B.T.Basavantappa(2003)

This chapter deals with the brief description of the varied steps undertaken by the investigator for the study. It includes the research approach, research design variables, setting of the study, population, sample and sampling techniques, development and description of the tool, data collection procedure and plan for data analysis.

3.1.RESEARCH APPROACH

The research approach was selected as Quantitative approach.

3.2.RESEARCH DESIGN

A **pre experimental one group pre-test and post-test design** was adopted to assess the effectiveness of laughter therapy in reduction of stress among the elderly people at selected old age home at Chennai.

SCHEMATIC REPRESENTATION

PRE-TEST	INTERVENTION	POST TEST
O1	X	O2

Key

O1 Pre-test to assess the level of stress among the elderly people

X Laughter Therapy

O2 Post-test to assess the level of stress among the elderly people

3.3. RESEARCH VARIABLE

The three categories of variable discussed in this study were

Independent Variable: Laughter therapy

Dependent Variable: Level of stress

Attribute Variable: Age, religion, marital status, education, occupation, financial support, number of children, mode of admission, recreational activities and duration of stay.

3.4. RESEARCH SETTING

The study was conducted at Kaakkum Karangalold age home at Thiruvananthapuram, Chennai.

3.5. STUDY POPULATION

Target population

The target population of this study is elderly people.

Accessible population

The accessible population was elderly people who were staying in the selected Old Age Home, Thiruvananthapuram, Chennai.

SAMPLE CHARACTERISTICS AND SELECTION

3.6. SAMPLE

The samples of this study were elderly people who were present during the time of data collection at selected Old Age Home at Thiruvananthapuram, Chennai.

3.7. SAMPLE SIZE

A Sample of 60 elderly people who met the inclusion criteria was selected for this study.

3.8. SAMPLING TECHNIQUE

Non – probability convenience sampling technique was used to select the sample.

3.9 CRITERIA FOR SAMPLE SELECTION

a) Inclusion Criteria

- ❖ The elderly people with stress in the age group of 60-70 years.
- ❖ The elderly people who were available during the data collection period.
- ❖ The elderly people who are willing to give consent for the study.

b) Exclusion Criteria

- ❖ The elderly people who had previous laughter therapy intervention
- ❖ The elderly people those who are suffering with systemic illness like asthma and COPD.

3.10. DEVELOPMENT AND DESCRIPTION OF THE TOOL

Tool was selected after extensive literature review from the various text book, internet search, guidance and discussion with experts in the field of nursing and psychiatry. A structured questionnaire was used to collect data from the elderly who are staying in the Old Age Home.

The tool consisted of Section A and B

1) Section A: Socio – Demographic profile

It includes socio demographic details such as: age, religion, marital status, education, occupation, financial support, number of children, mode of admission, recreational activities and duration of stay.

2) Section B: Structured Questionnaire

The structured questionnaire regarding assessment of stress based on three part likert scale

Part-A Depression level of elderly people

Part-B Anxiety level of elderly people

Part-C Stress level of elderly people

It covers the following domains of stress

- ❖ Meaning
- ❖ Physical symptoms of stress
- ❖ Negative emotional state of depression, anxiety and stress.

SCORING KEY

The questionnaire which is used to assess the stress level of elderly people consists of four statements and the score for them were dealt as given below.

Score	Statement
0	Did not apply to me at all
1	Applied to me to some degree, or some of the time
2	Applied to me to a considerable degree, or a good part of time
3	Applied to me very much, or most of the time

- ❖ Maximum score: 126
- ❖ Minimum score: 25

3.10. SCORE INTERPRETATION

To interpret the level of stress among the elderly people. The score is classified into five categories like normal, mild, moderate, severe, and extremely severe.

SCORE INTERPRETATION

Level of stress	Range
Normal	0 - 30
Mild	31- 40
Moderate	41 - 59
Severe	60-79
Extremely severe	80 above

3.12. TESTING OF THE TOOL

3.12.1. *Validity of the Tool*

Data collection tool is an instrument that measures the variables of interest of the study accurately, precisely and sensitively.

Content validity of the tool was obtained from experts in the field of psychiatric nursing, psychiatry and psychology. The experts were an associate professor, psychiatrist and clinical psychologist. The experts were requested to check the relevance, sequence and adequacy of the content. There was uniform agreement of the tool which is adopted to conduct the study. Hence, the investigator precedes the same tool.

3.12. PILOT STUDY

Pilot study is a trail run for the main study to test the reliability, practicability and feasibility of the study.

The main objective of the pilot study is to help the researcher to become familiar with the use of tool and to find out the difficulties in the main study. The investigator underwent Laughter therapy training programme from Humor club International, Mylapore and obtained a certificate. The pilot

study was conducted after getting ethical clearance and the permission from the kaakkumkarangal old age home, Thiruvananthapuram. It was conducted for a period of one week from 05.01.2015 to 10.01.2015. Sample of 10 elderly people were selected by non-probability convenient sampling technique. Informed consent was obtained from them before collection of the data.

Data were collected from the elderly people by structured questionnaire before the implementation of laughter therapy. After completion of laughter therapy sessions, the elderly people were assessed their stress level by using same scale.

RELIABILITY OF THE TOOL

After pilot study reliability of the tool was assessed by using split - half method. The 'r' value obtained was 0.80 which showed a high positive correlation. Hence the tool was considered reliable.

3.13 PROCEDURE FOR DATA COLLECTION

The study was conducted in kaakkumkarangal old age home at Thiruvananthapuram Chennai. A formal permission was obtained from the Director of kaakkumkarangal old age home. The Investigator obtained data from the elderly people who are staying in the home. The main study was conducted for a period of 4 weeks that from 10. 2. 2015 to 6. 3. 2015. Initially the investigator approaches each elderly after getting permission from the Director. The old age home consists of 100 elderly in whom 35 were males and 65 females. From the total, investigator selected 75 elderly people initially. In 5 of them were dropped due to chronic illness, 7 of them were unable to attend due to their physical inability and 3 were not willing to participate the study. The investigator selected 60 elderly people as per the inclusion and exclusion criteria. The elderly people were introduced with the whole programme after an introduction and then a written informed consent was obtained from them for willingness to participate in the study. They were assured that their responses

and details will be kept confidential and will be used only for the research purpose. Before the tool was administered some informal discussion were made with participants to establish rapport so that they would be relaxed.

The total 60 elderly people were divided into two groups. Each group contained 30 people. Every day the participants were gathered around 10AM in the common hall. The pretest questionnaire was administered to them and they were asked to give appropriate answers for all statements to find out the stress level by structured scale before laughter therapy. First the investigator demonstrated the laughter therapy steps to first group for 45 to 50 minutes in the morning and evening session per day up to first 2 weeks.

Steps of the laughter therapy

- 1) **Deep Breathing Exercises**
- 2) **Rhythmic clapping and warming up exercises**
- 3) **Ho- Ho- Ha -Ha -Ha chanting**
- 4) **Laughter exercises**
 - a. **Yogic laughter exercises**
 - b. **Playful laughter exercises**
 - c. **Value based laughter exercises**
- 5) **Playful laughter techniques**
- 6) **Closing technique**

Then the post- test was done by using the same scale in the 3rd week. By the same time the laughter therapy was practiced with the second group in the 2nd and 3rd week and post-test was done on the 4th week. At the end of each session doubts were clarified. During the laughter therapy the participant's involvement was good.

SCHEDULE OF DATA COLLECTION PROCEDURE

Day	10.00am to 10.30 am	11.00 am to 12.30pm		3.00pm to 4.30 pm	4.30pm to 5.00pm
Day 1	State about introduction purpose, benefits of laughter therapy	Pre-test was conducted	L U N C H B R E A K & S L E E P	Informed consent was obtained.	Discuss about merits and demerits of laughter therapy
Day 2	Explain the steps and techniques of laughter therapy were given	Demonstrate the first step Deep breathing exercises. (Inhale slowly through nose and exhale out through mouth fully)		Re-demonstration of the first step	Encourage the individual practice and clarification of doubts
Day 3	Reviewing the previous class.	Demonstrated the 2nd step (i.e.) Rhythmic clapping & warming up exercises. (We clap parallel to each other like 1-2,1-2-3		Re-demonstration of the first and the second step	Clarification of doubts in the first 2 steps
Day 4	Group discussion about the first 2 step of laughter therapy.	Demonstrated the 3rd step. (i.e.) Ho-Ho- Ha -Ha –Ha chanting. (This is done by group along with rhythmic clapping or with arm movement without clapping		Encouraged to practice third step. It is a very essential one.	Individual practice to overcome the difficulties
Day 5	Encouraged to remember all previous steps of laughter therapy	Demonstrated the 4th step.(i.e.)Laughter exercises 1.Yogic laughter exercises 2.Playfullaughter exercises 3.Value based laughter exercises		Practiced each type of laughter exercise 1.lion laughter 2.Onemeterlaughter, 3.milkshakelaughter	Clarification of doubts along with group practicing
Day 6	Reviewing previous steps laughter session	Demonstrated the fifth step Playfullaughter techniques (Very good (clap), very good (clap)yeah)		Re-demonstration of fifth step	Individual practicing of all the five steps
Day 7	Reviewing all the steps from the first class	Demonstrated the last step (i.e.) closing technique (three slogans are chanted)		Re-demonstration of all the steps of laughter therapy	Clarification of doubts throughout the session

Association was established between selected demographic variables. Towards the end of the data collection, elderly people shared

their experience about the study that it will help to reduce stress and they are requested to practice similar laughter therapy programme in their future.

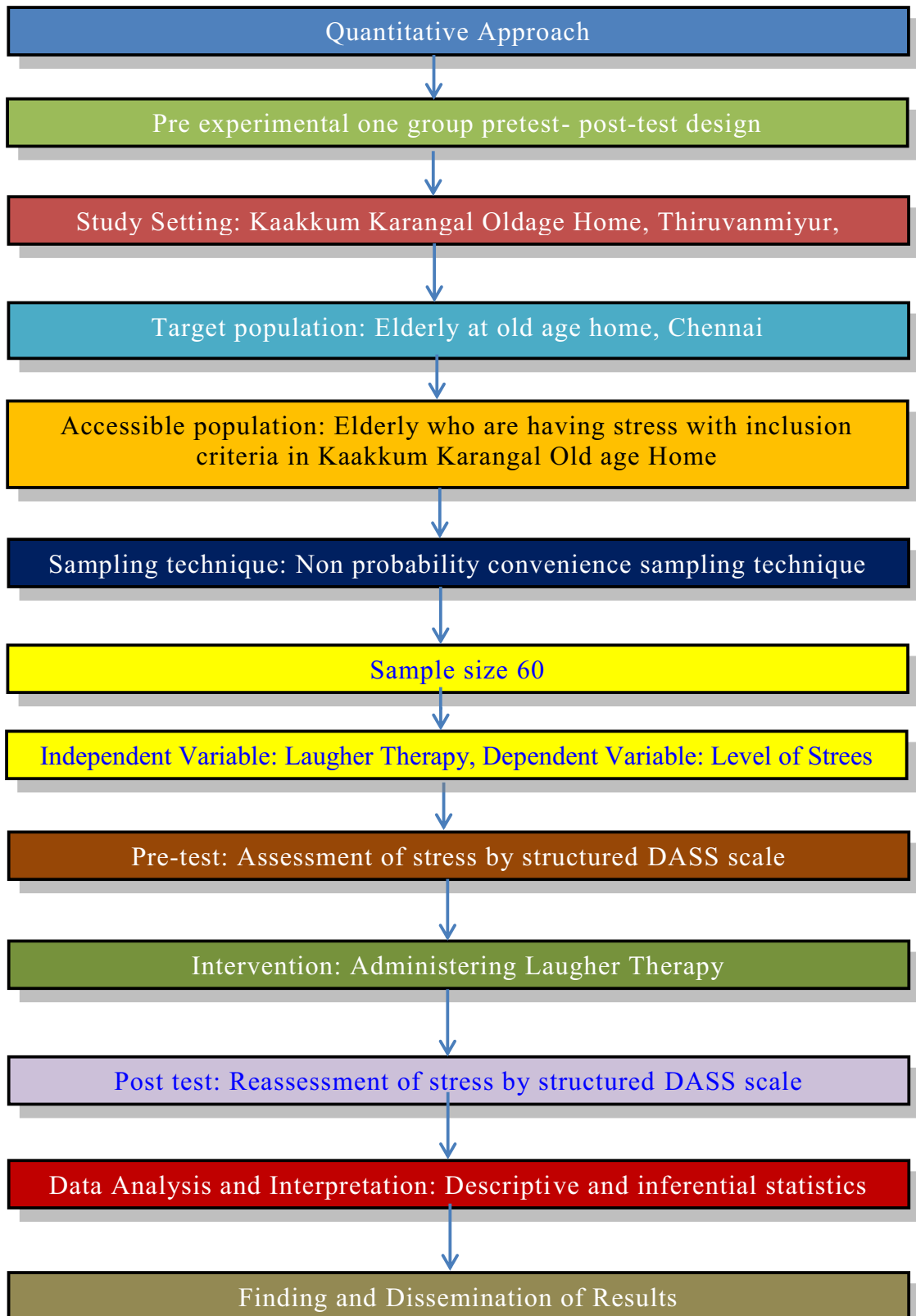
3.14. PLAN FOR DATA ANALYSIS

- ❖ Demographic variables in categories given in frequencies with their percentages.
- ❖ Stress score given in mean and standard deviation
- ❖ Quantitative stress score in pre-test and post-test will be compared using student's paired t-test
- ❖ Correlation between stress and attitude will be analyzed by using by Karl Pearson's Correlation Coefficient Association between demographic variables and stress score analyzed using Pearson Chi-square test

3.11. ETHICAL CONSIDERATION

The study was conducted after obtaining approval from the Ethics Committee, Madras medical college, Chennai-3. The respondents were explained about the purpose and need for the study. They were assured that their details and answers will be used only for the research purpose. Further they were ensured that their details will be kept confidentially. Thus the investigator followed the ethical guidelines, which were issued by the Ethics Committee after getting a written permission.

SCHEMATIC REPRESENTATION OF RESEARCH STUDY



CHAPTER-IV

4.1. DATA ANALYSIS AND INTERPRETATION

Statistical analysis is a method of rendering quantitative information and elicits meaningful and intelligible form of research data. Analysis and interpretation of data was done by using descriptive and inferential.

- Polit (2004)

This chapter deals with the analysis and interpretation of the data obtained from 60 elderly people who were staying in kaakkum karangal Old Age Home at Thiruvananthapuram. The collected data were tabulated and presented according to the objectives under the following headings

Section-I Socio demographic profile of the elderly people

Section-II Stress level of the elderly people before laughter therapy intervention.

Section-III Stress level of the elderly people after laughter therapy intervention

Section-IV Effectiveness of the laughter therapy

Section-V Associate the effectiveness of laughter therapy with selected demographic Variables.

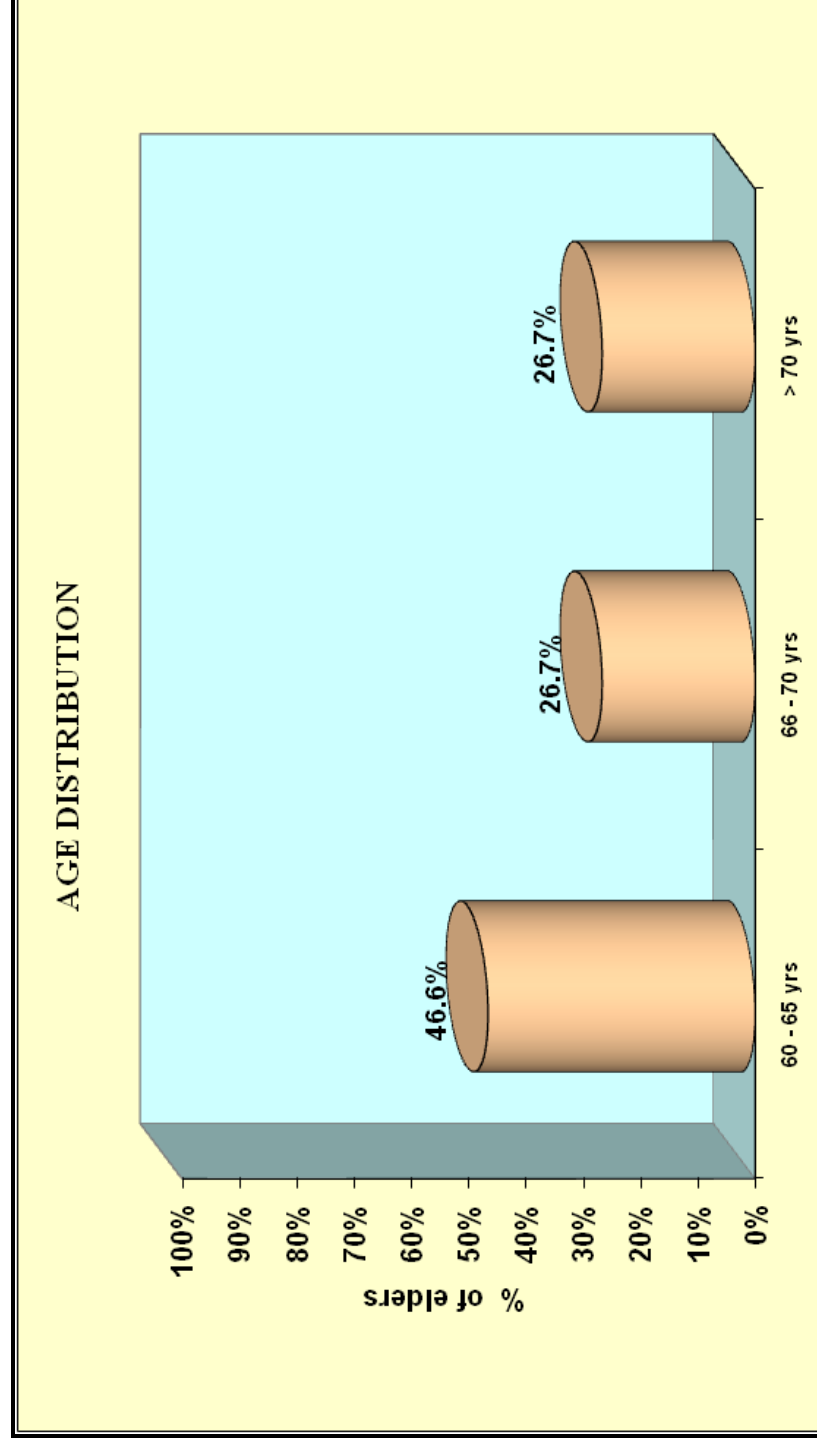
Table-4.1: Socio Demographic Profiles of the Elderly People

Demographic variables		Number of elderly people	%
Age	60 - 65 yrs.	28	46.6%
	66 - 70 yrs.	16	26.7%
	> 70 yrs.	16	26.7%
Religion	Hindu	54	90.0%
	Christian	4	6.7%
	Muslim	2	3.3%
Marital status	Married	6	10.0%
	Single	11	18.3%
	Divorced	1	1.7%
	Widowed	42	70.0%
Education	Un educated	20	33.3%
	Primary	12	20.0%
	Higher secondary	22	36.7%
	Graduate	6	10.0%
Occupation	Semi- Government	23	38.3%
	Private	37	61.7%
Financial support	Pensioner	7	11.7%
	None of the above	53	88.3%
Number of children	1 (or) 2	16	26.7%
	More than 2	17	28.3%
	No children	27	45.0%
Mode of admission	Referred by trust	12	20.0%
	Voluntary admission	29	48.3%
	From the children / others	19	31.7%
Recreational activities	Watching TV	11	18.3%
	Reading books	7	11.7%
	Talking with others	23	38.3%
	Others	19	31.7%
Duration of the stay	Below one year	21	35.0%
	2-3 years	20	33.3%
	3-5 years	15	25.0%
	More than 5 years	4	6.7%

Table 4.1: Shows the demographic information of elderly people those who participated in this study

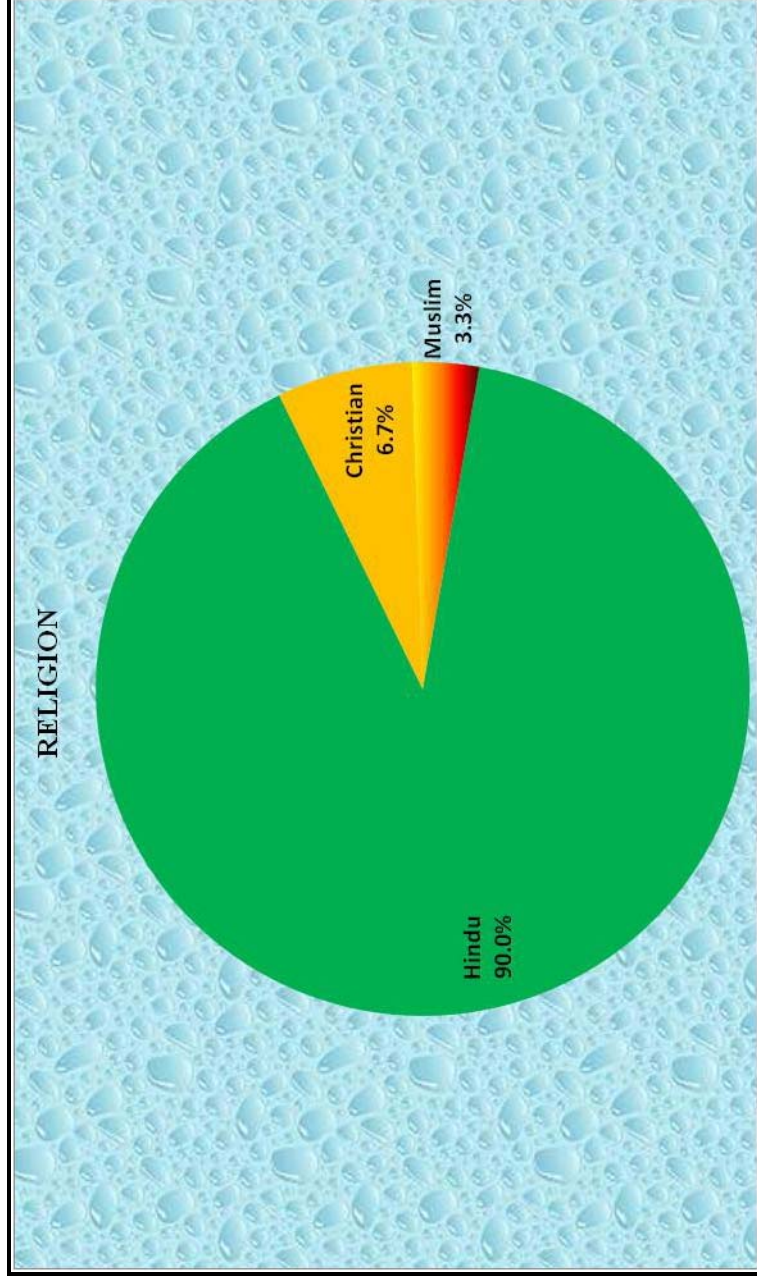
Among the elderly people, higher proportion (46.6 %) of the elderly people belongs to the age group of 60- 65 years. Religion wise (90.0%) of the elderly people were Hindu. As far as the educational status of the elderly people is concerned, higher proportion (36.7%) of the elderly people had higher secondary. Most of them (70.0%) were widowed. According to their occupational status, mostly (61.7%) they are belongs to private. Higher proportion (88.3%) of the elderly people had no sources of financial support and they belong to the old age home only. Among the respondents, almost half of the people (45.0%) had no children. Most of the elderly people (48.3%) got admitted into the Old Age Home on their own. As per their recreational activities, the higher proportions of the elderly (38.3%) were willing to talk with others. Higher proportions of the elderly people (35.0%) who were staying at the Old Age Home nearly below one year.

FIG 4.1 DISTRIBUTION OF THE ELDERLY PEOPLE AGEWISE



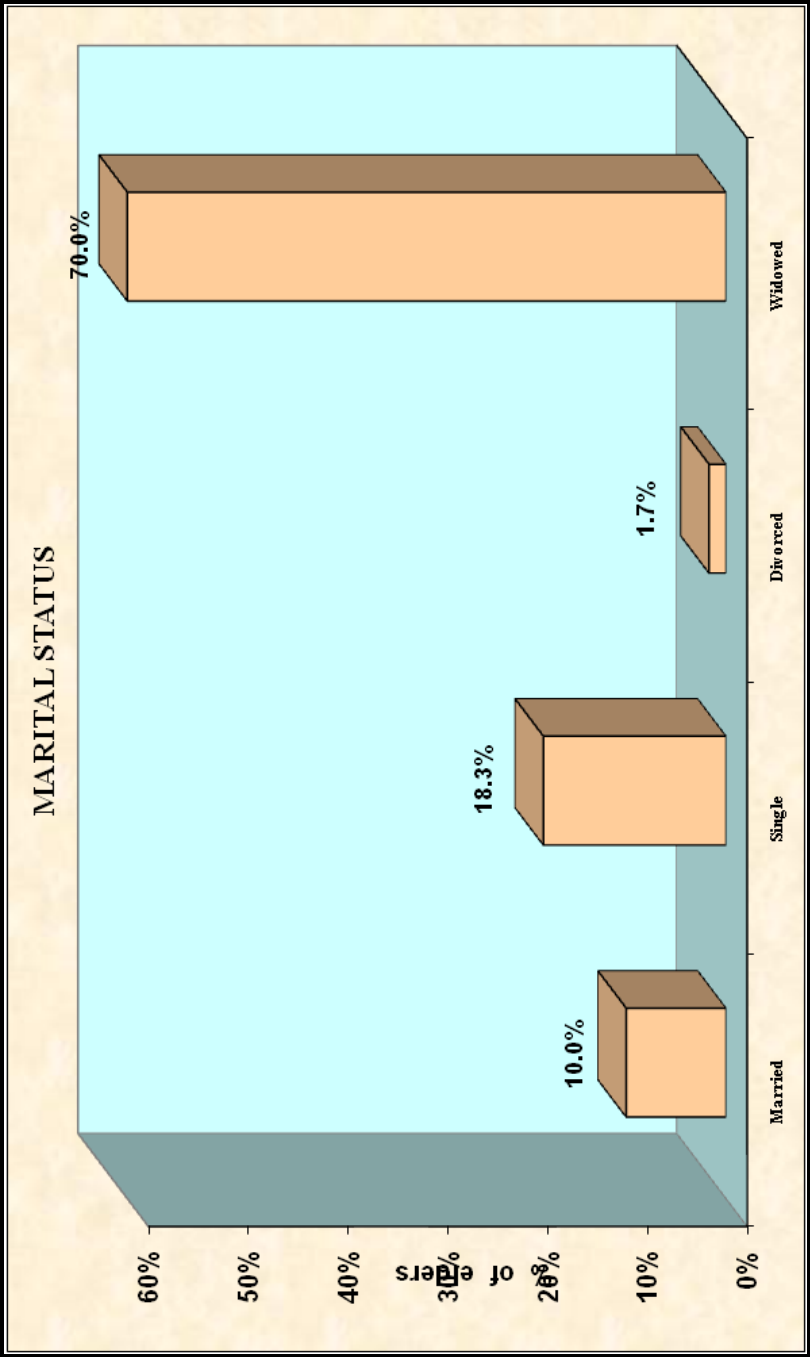
46.6 % of the elderly people were in the age group of 60 – 65 years

FIG 4.2 DISTRIBUTION OF THE ELDERLY PEOPLE – RELIGIONWISE



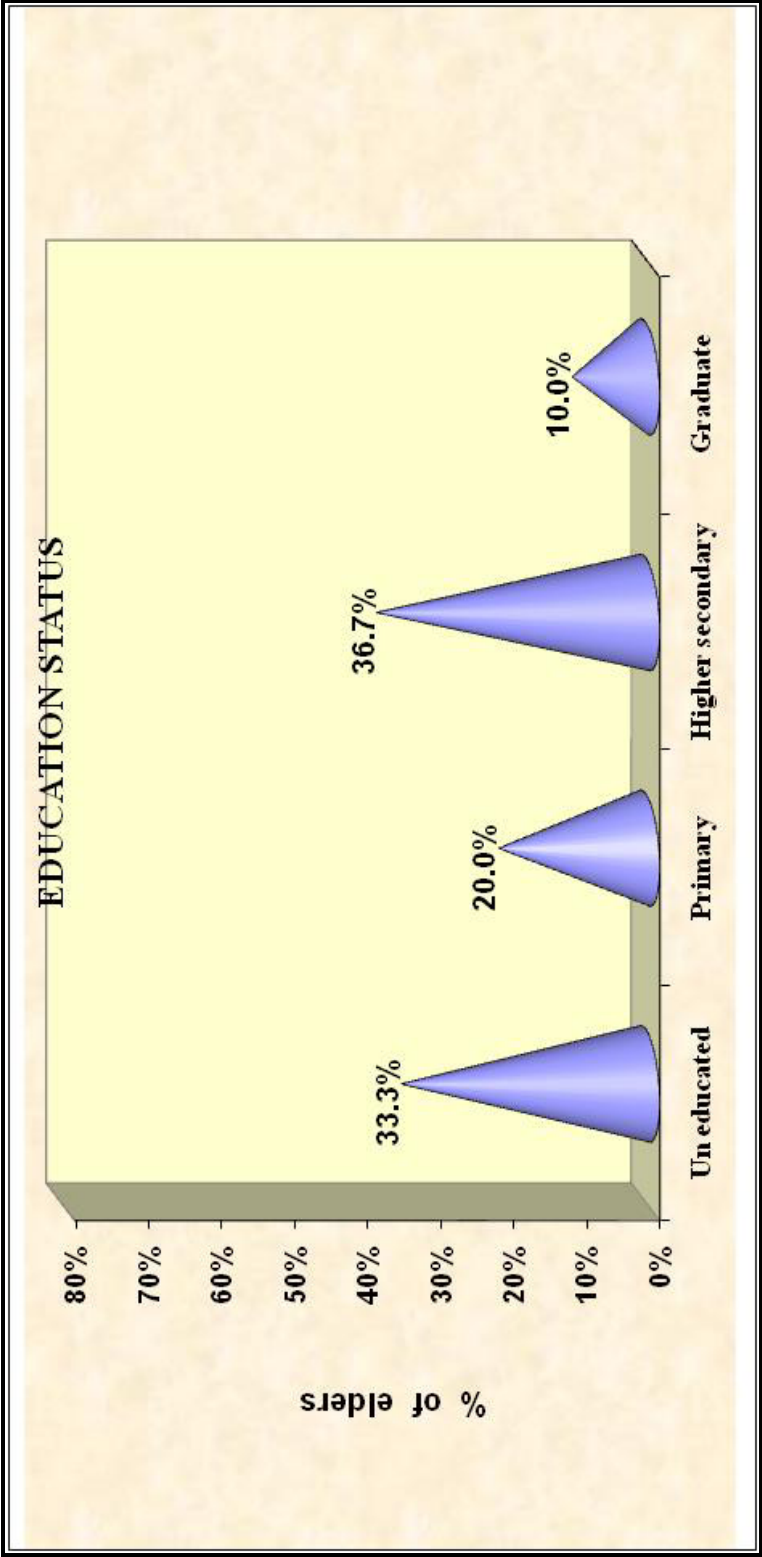
90.0% of the elderly people were Hindu

FIG 4.3 DISTRIBUTION OF THE ELDERLY PEOPLE - MARITAL STATUS WISE



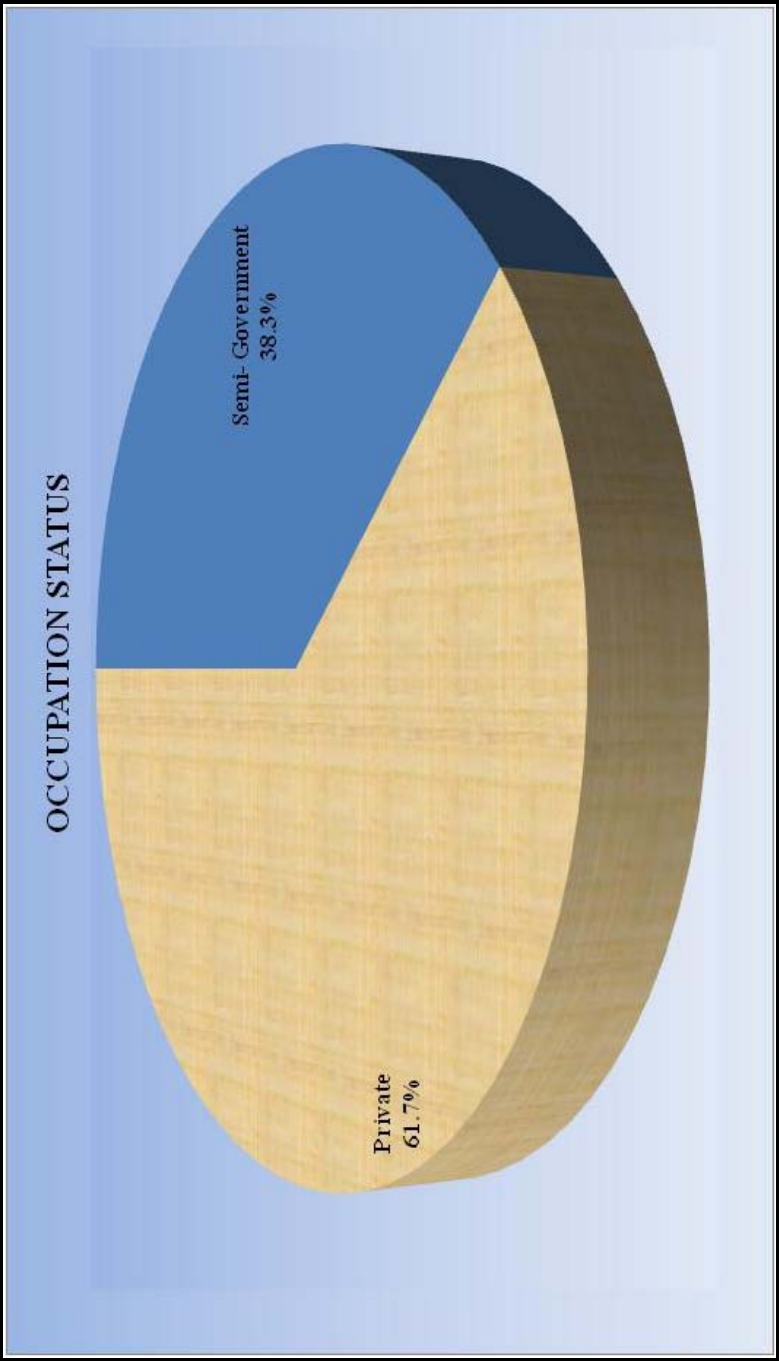
70.0% of the elderly people were married

FIG 4.4 DISTRIBUTION OF THE ELDERLY PEOPLE - EDUCATIONAL STATUSWISE



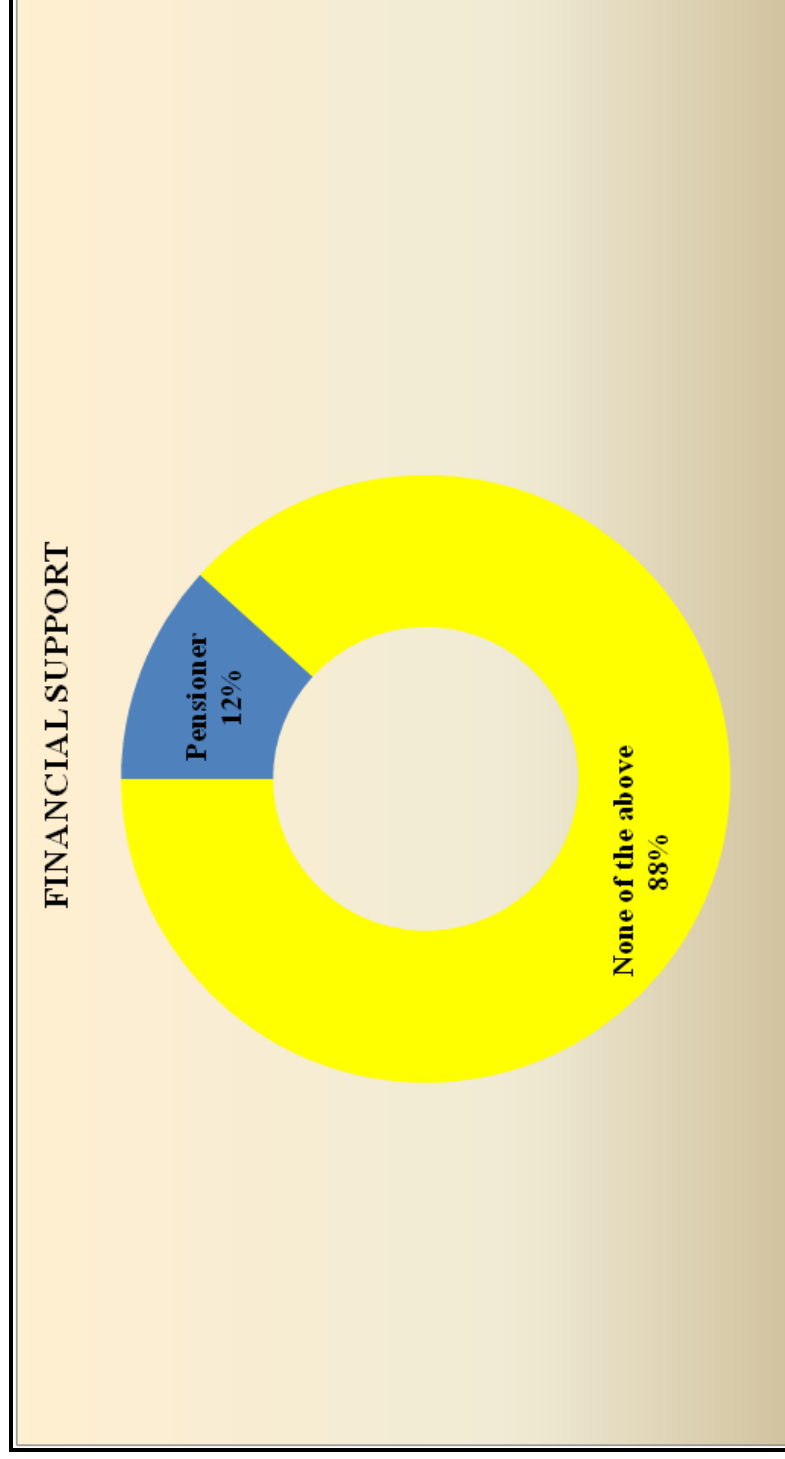
36.7% of the elderly people had higher secondary Education

FIG 4.5 DISTRIBUTION OF THE ELDERLY PEOPLE - OCCUPATIONAL STATUSWISE



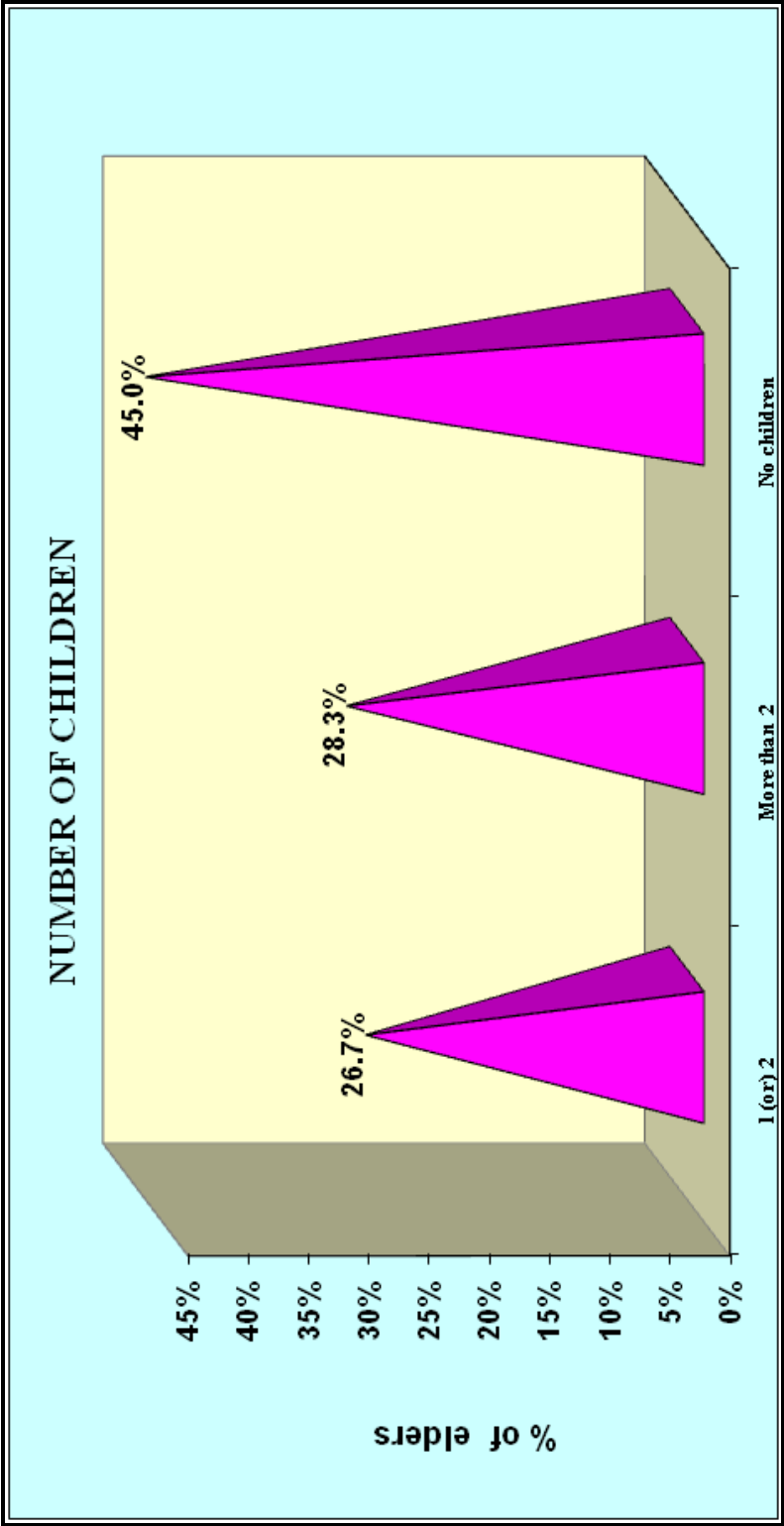
61.7% of the elderly people had private occupational status

FIG 4.6 DISTRIBUTION OF THE ELDERLY PEOPLE - FINANCIAL SUPPORT



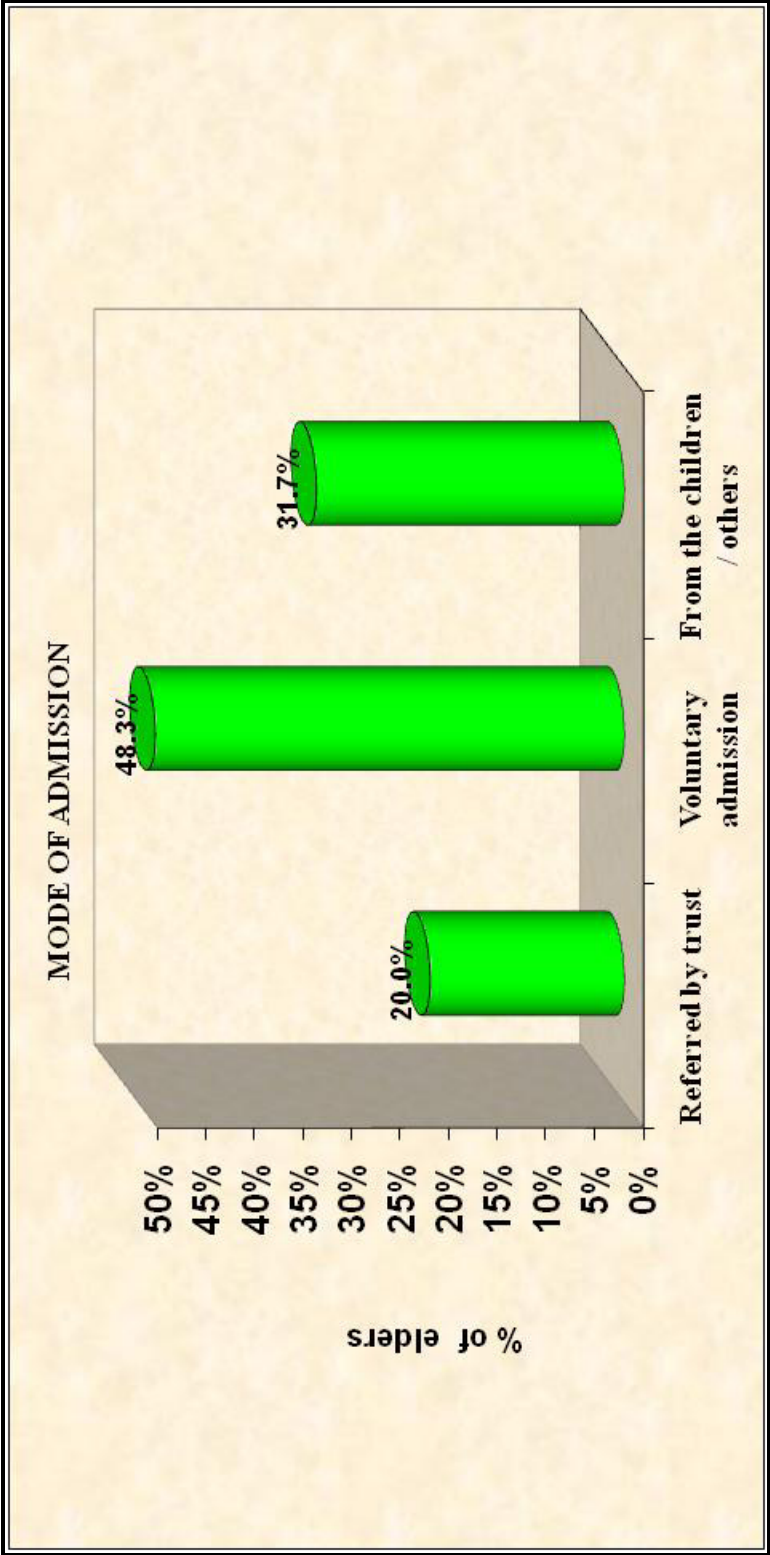
88% of the elderly people had no financial support

FIG 4.7 DISTRIBUTION OF THE ELDERLY PEOPLE - NUMBER OF CHILDREN2



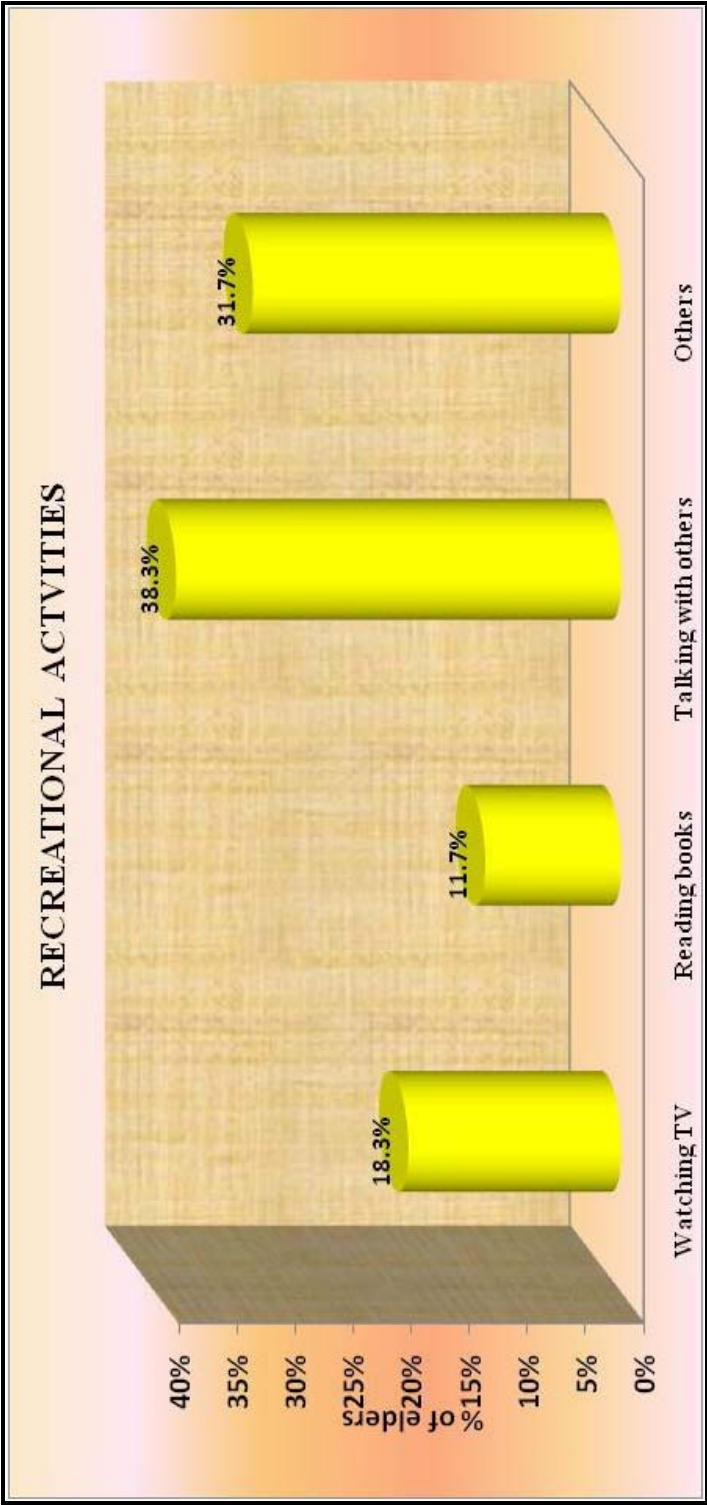
45.5% of the elderly people had no children.

FIG 4.8 DISTRIBUTION OF THE ELDERLY PEOPLE - MODE OF ADMISSION



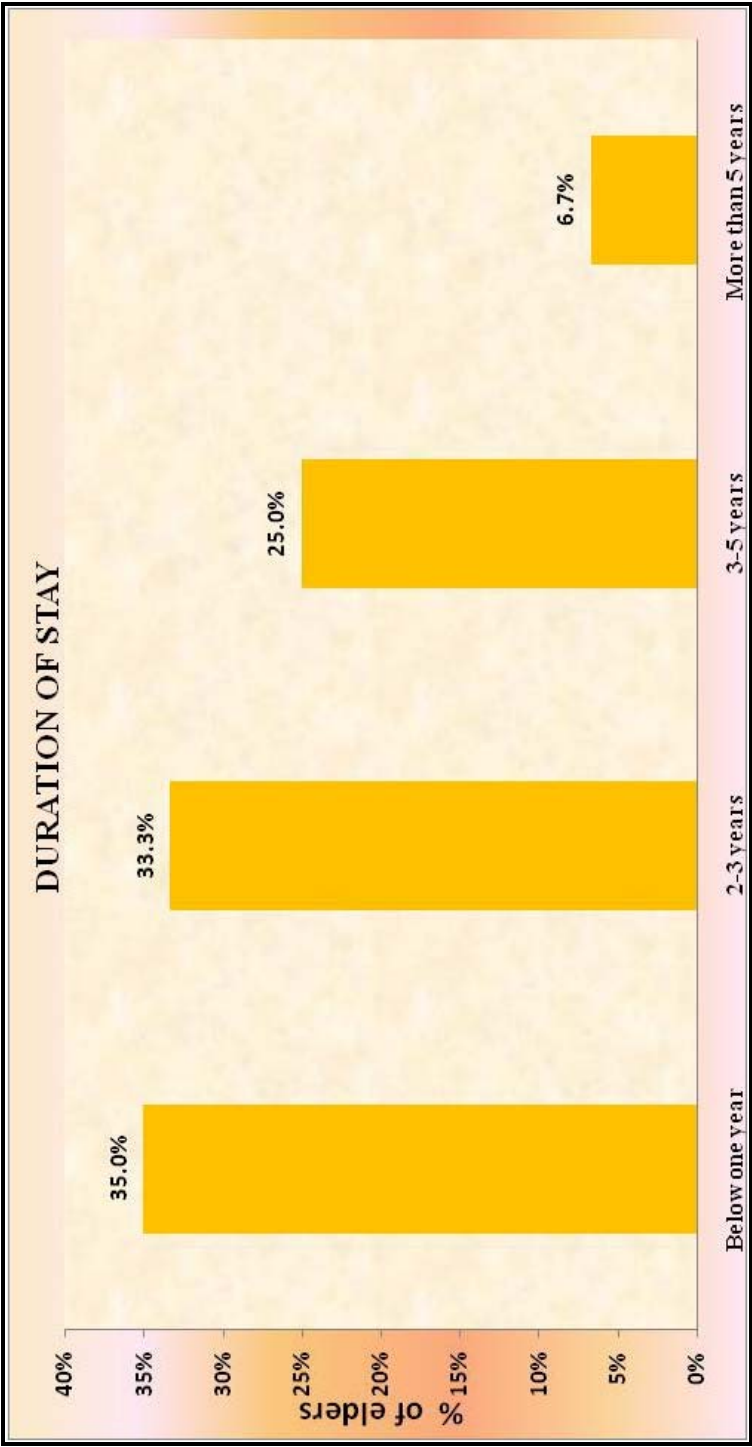
48.3% of the elderly people were admitted by voluntary admission

FIG 4.9 DISTRIBUTION OF THE ELDERLY PEOPLE - RECREATIONAL ACTIVITIES



38.3 % of the recreational activities are talk with others

FIG 4.10 DISTRIBUTION OF THE ELDERLY PEOPLE BY DURATION OF STAY



35.0% of the elderly people were staying in the Old Age Home nearly below one year.

SECTION-II

Table-4.2: Each Domainwise Percentage of Pretest Stress Score

DASS score on	Number of questions	Max – Min score	Mean	SD	Percentage of mean score
Depression	14	0 – 42	25.38	5.91	60.4%
Anxiety	14	0 – 42	26.17	6.06	62.3%
Stress	14	0 – 42	27.28	6.41	65.0%
OVERALL	42	0 – 126	78.83	15.71	62.6%

Table 4.2 shows each aspect wise pre-test stress scores among elderly people at selected Old Age Home. They are having more score in stress (65%) and fewer score in depression(60.4%). Overall they are having 62.6% of DASS score.

Table-4.3: Pretest Level of Stress of Elderly People

DASS score on	Normal		Mild		Moderate		Severe		Extremely severe	
	N	%	n	%	N	%	N	%	N	%
Depression	1	1.6%	3	5%	11	18.3%	20	33.3%	25	41.6%
Anxiety	1	1.6%	2	3.3%	8	13.3%	18	30%	31	51.7%
Stress	2	3.3%	2	3.3%	4	6.6%	16	26.6%	36	60.0%

Table 4.3 Shows each domainwise level of pre-test stress score among elderly people at selected Old Age Home

TABLE 4.4. PRETEST LEVEL OF DASS SCORE

Level of DASS	Number of elderly people	Percentage
Normal	1	1.6%
Mild	2	3.3%
Moderate	8	13.3%
Severe	18	30%
Extremely severe	31	51.7%
Total	60	100%

Table 4.4 shows level of stress before administration of laughter therapy, 1.6% of the elderly people are normal and 3.3% of them having mild stress. 13.3% of the elders are having moderate level of stress, 30% of them are having severe stress and 51.7% of them are having extremely severe stress.

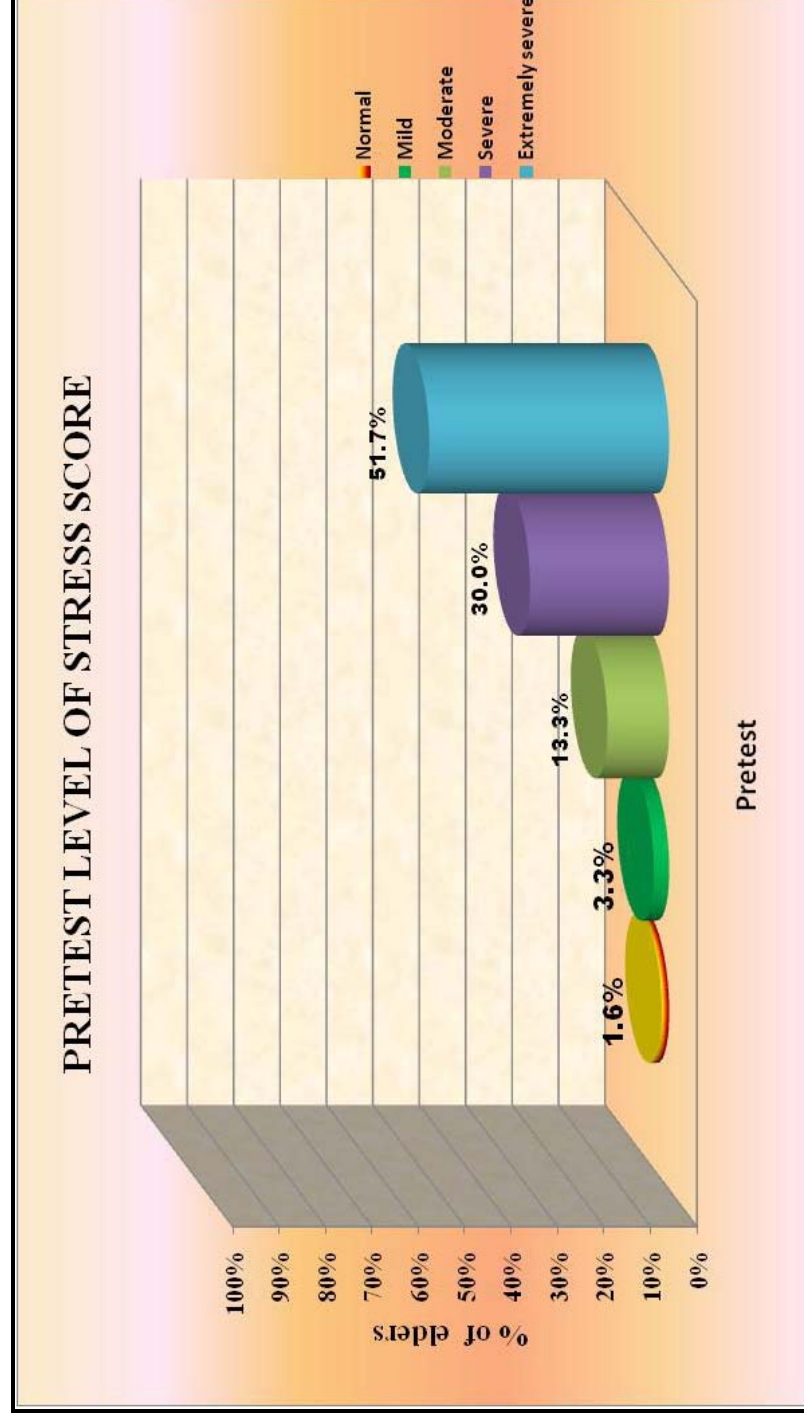
SCORE INTERPRETATION:

Minimum score = 0, Maximum score =30, Questions= 42, Total score=128

S No.	Grade	Score
1.	Normal	0 – 30
2.	Mild	31 – 40
3.	Moderate	41 – 59
4	Severe	60 – 79
5	Extremely severe	>79

	Depression	Anxiety	Stress
Normal	0 – 9	0 - 7	0 – 14
Mild	10 – 13	8 – 9	15 – 18
Moderate	14 – 20	10 – 14	19 – 25
Severe	21 – 27	15 – 19	26 – 33
Extremely Severe	28+	20+	34 +

FIG 4.11 DISTRIBUTION OF PRE-TEST LEVEL OF STRESS OF ELDERLY PEOPLE



Higher proposition of the participants 51.7 % had extremely severe stress and 1.6 % is normal

SECTION-III

Table-4.5: Each Domainwise Percentage of Posttest Stress Score

DASS score	Number of questions	Min – Max score	Mean	SD	Percentage of mean score
Depression	14	0 – 42	11.78	2.89	28.0%
Anxiety	14	0 – 42	12.70	2.78	30.2%
Stress	14	0 – 42	13.23	2.46	31.5%
Overall	42	0 – 126	37.72	5.51	29.9%

Table 4.5: Shows each aspect wise post-test stress scores among elderly people at selected Old Age Home. They are having more score in stress (31.5%) and fewer score in depression (28.0%). Overall they are having 29.9% of DASS score.

Table-4.6: Post-Test Level of Stress Of Elderly People

DASS score on	Normal		Mild		Moderate		Severe		Extremely severe	
	N	%	N	%	N	%	N	%	N	%
Depression	41	68.3%	10	16.6%	6	10%	2	3.3%	1	1.6%
Anxiety	36	60.0%	12	20%	7	11.6%	3	5%	2	3.3%
Stress	34	56.7%	12	20%	11	18.3%	2	3.3%	1	1.6%

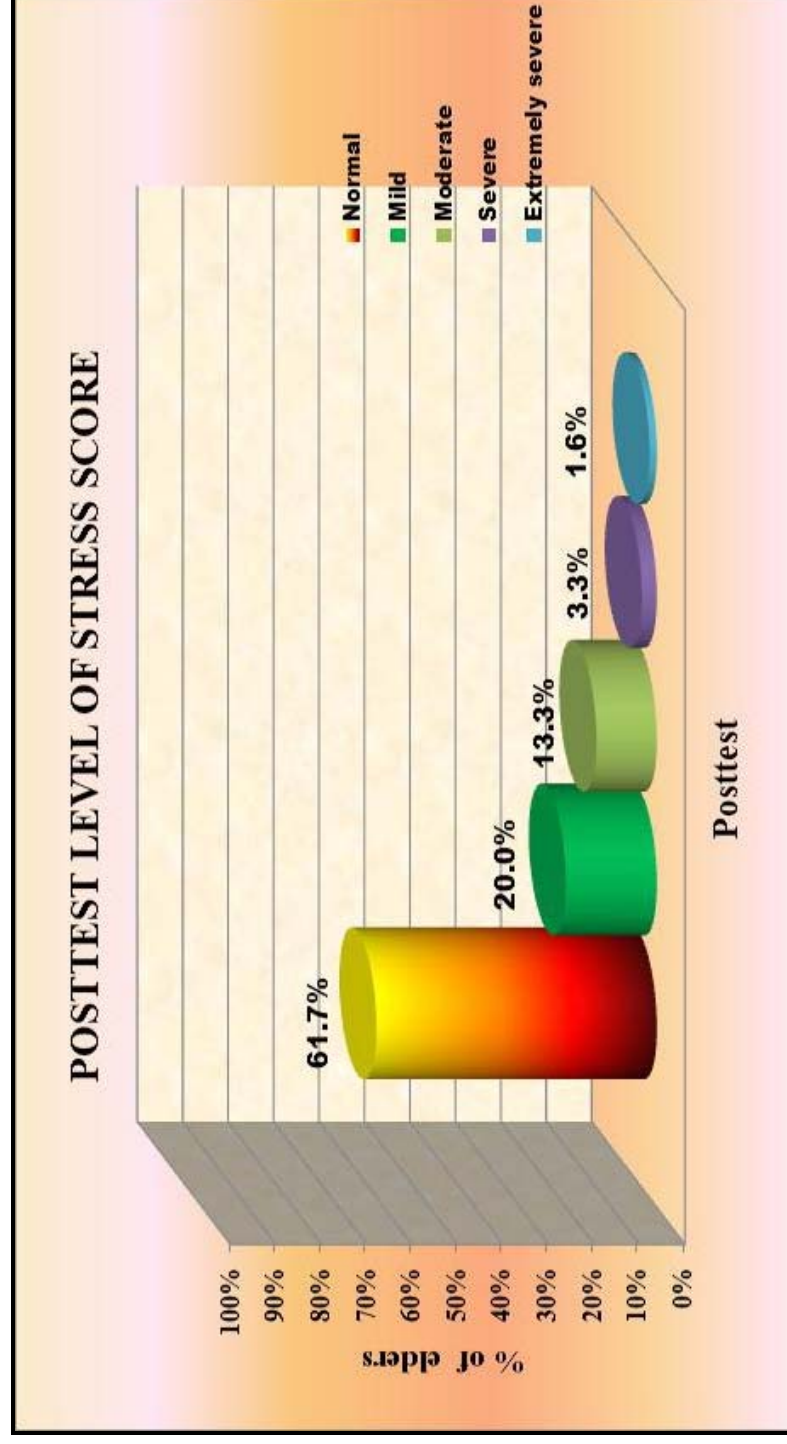
Table 4.6: Shows each domainwise level of post-test stress score among elderly people at selected Old Age Home.

Table-4.7: Posttest Level of Dass Score

Level of DASS	Number of Elderly People	Percentage
Normal	37	61.7%
Mild	12	20%
Moderate	8	13.3%
Severe	2	3.3%
Extremely severe	1	1.6 %
Total	60	100%

Table 4.7: Shows level of stress after administration of laughter therapy. 61.7% of the elderly people are having normal level of stress, 20% of them are having mild stress and 13.3% of them are having moderate stress. 3.3% of them having severe stress and 1.6% of them having extremely severe stress.

FIG 4.12 DISTRIBUTION OF POST TEST LEVEL OF STRESS OF ELDERLY PEOPLE



The post-test level of stress showed 61.7% of them are normal and 1.6% of them had extremely severe stress

SECTION-IV

Table-4.8: Comparison of Mean Stress Score

DASS Scale	Stress score				Difference	Student's paired t-test
	Pre-test		Post-test			
	Mean	SD	Mean	SD		
Depression	25.38	5.91	11.78	2.89	13.60	t=15.06, P=0.001*** Significant
Anxiety	26.17	6.06	12.70	2.78	13.47	t=15.18, P=0.001*** Significant
Stress	27.28	6.41	13.23	2.46	14.05	t=14.37, P=0.001*** Significant

* Significant at $P \leq 0.05$ ** highly significant at $P \leq 0.01$ *** very high significant at $P \leq 0.001$

Table-4.8: Comparison of Pre-Test and Post-Test Mean DASS Score

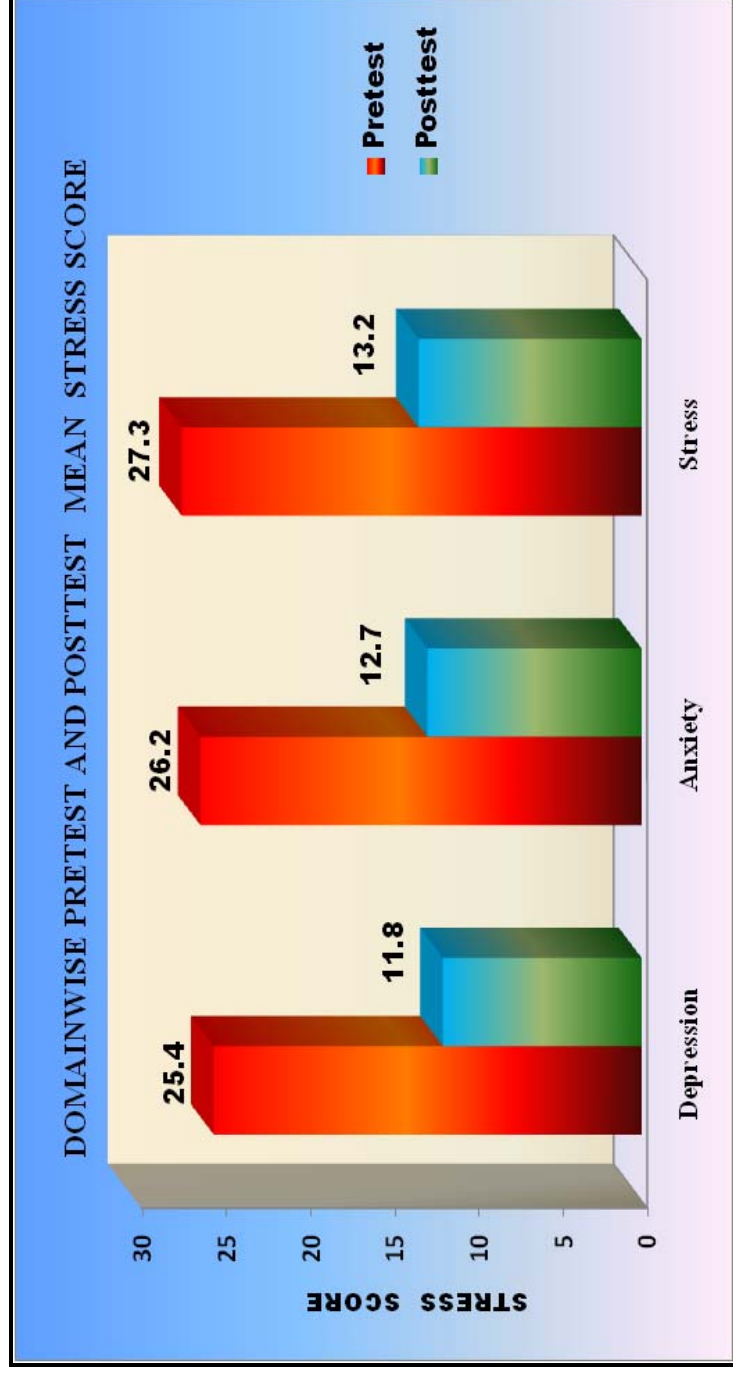
Depression: Before laughter therapy, elderly people scored 25.38 and after laughter therapy, they are able to score 11.78. So the difference is 13.60. This difference between pre-test and post-test is large and it is statistically significant.

Anxiety: Before laughter therapy, elderly people scored 26.17 and after laughter therapy, they are able to score 12.70. So the difference is 13.47. This difference between pre-test and post-test is large and it is statistically significant.

Stress: Before laughter therapy, elderly people scored 27.28 and after laughter therapy, they are able to score 13.23. So the difference is 14.05. This difference between pre-test and post-test is large and it is statistically significant.

Statistical significance was calculated by using student's paired 't' test.

4.13. COMPARISON OF DOMAINWISE MEAN STRESS SCORE



Pre-test stress score was 27.3 whereas post-test stress score was 11.8

TABLE 4.9: COMPARISON OF OVERALL DASS SCORE

	Number of elderly People	Mean \pm SD	Difference	Student's paired t-test
Pre-test	60	78.83 \pm 15.71	41.11	t=17.50 P=0.001*** Significant
Post-test	60	37.72 \pm 5.51		

* Significant at $P \leq 0.05$ ** highly significant at $P \leq 0.01$ *** very high significant at $P \leq 0.001$

Table-4.9: Depicted the comparison of overall stress score between pre-test and post -test.

The overall pre-test stress score among elderly people was 78.83 with standard deviation of 15.71. And the post-test, they had scored 37.72 with standard deviation of 5.51. So the difference is 41.11.

The difference between pre-test and post-test DASS score is large and it is statistically significant. Differences between pre-test and post-test stress analysed by using paired t-test.

**FIG 4.14: COMPARISON OF PRE-TEST AND POST-TEST
MEAN STRESS SCORE AMONG ELDERLY PEOPLE**

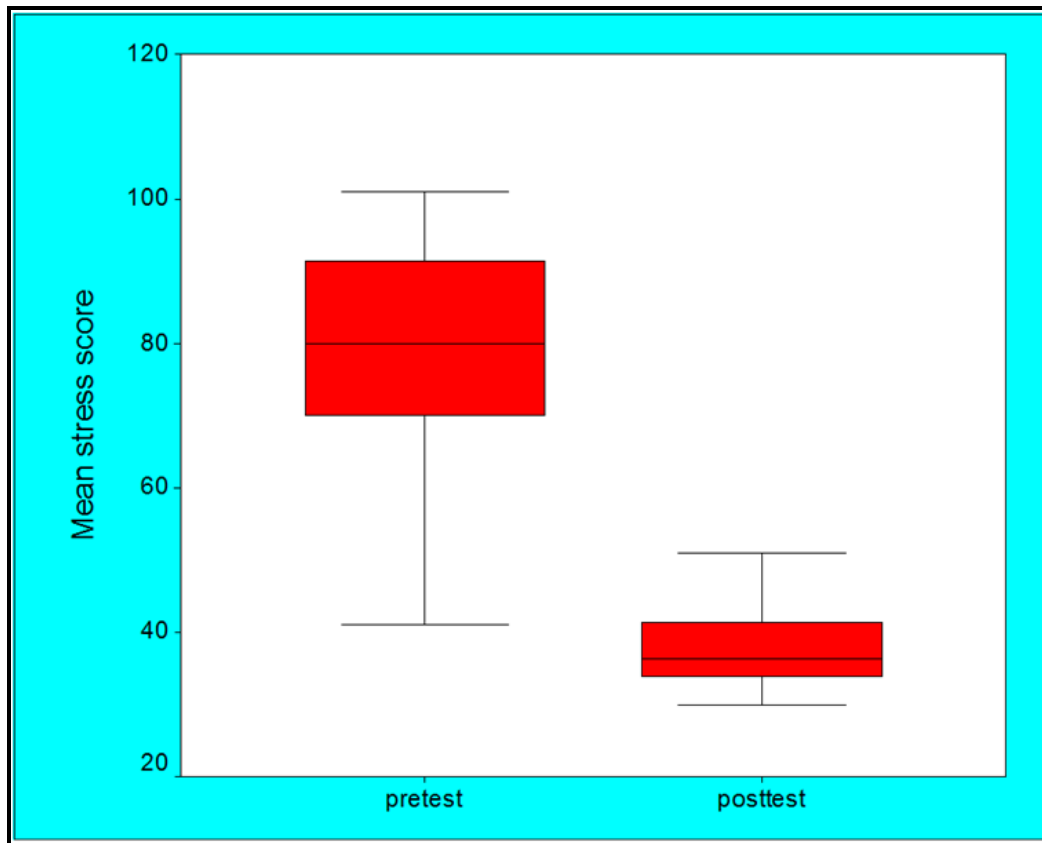


Fig 14.4: Box plot compares elderly people pre-test and post-test score regarding stress level

Table-4.10: Comparison of Pre-Test and Post-Test Level of Stress

	Pre-test		Post-test		Chi-square test
	Number of elderly people	Percentage	Number of Elderly people	Percentage	
Normal	1	1.6%	37	61.7%	$\chi^2=101.05$ $P=0.001^{***}$ Significant
Mild	2	3.3%	12	20%	
Moderate	8	13.3%	8	13.3%	
Severe	18	30%	2	3.3%	
Extremely severe	31	51.7%	1	1.6 %	
Total	60	100%	60	100%	

* Significant at $P \leq 0.05$ ** Highly Significant at $P \leq 0.01$

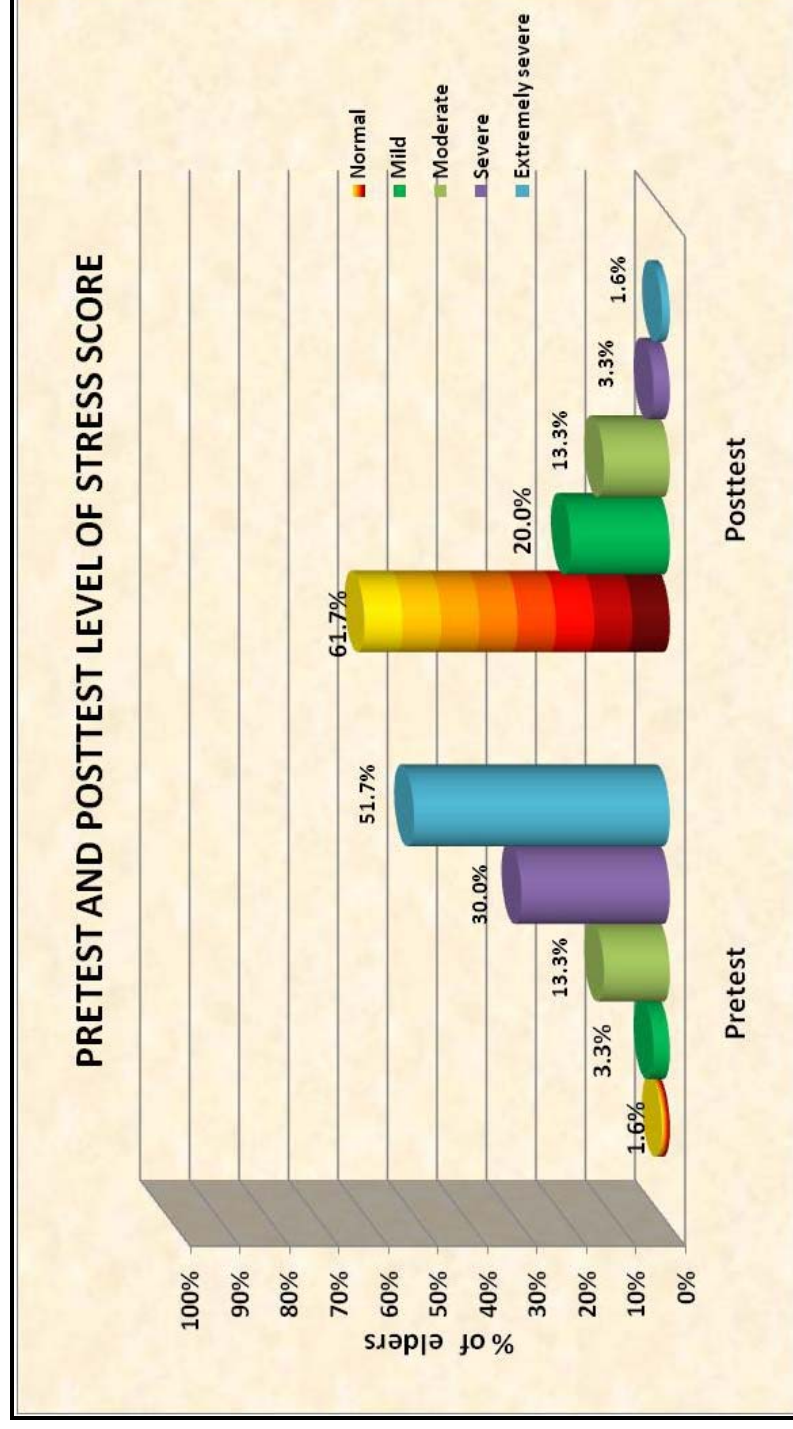
*** Very High Significant at $P \leq 0.001$

Table 4.10: Projected the comparison of pre-test and post-test level of stress among the elderly people.

Before administration of laughter therapy, 1.6% of the elderly people are normal, 3.3% of them have mild stress, 15% of the elders are having moderate level of stress 30% of them are having moderate stress and 51.7% of them are having extremely severe stress.

After administration of laughter therapy 61.7% of the elderly are in normal. 21.7% of them are suffering with mild stress and 16.6% of them are suffering with moderate stress. 3.3% of them having severe stress and 1.6% of them have extremely severe stress. Chi-square test was used to test statistical significance.

FIG 4.15 PRE- TEST AND POST- TEST LEVEL OF STRESS SCORE



The comparison of pre-test and post-test percentage of stress on each domain wise of the elderly people where the overall pre-test level of stress score was 51.7% and the post-test level of normal score was 61.7%

SECTION V

Table-4.11: Percentage of Stress Reduce After Laughter Therapy

Domain	Pre-test	post-test	percentage of reduction of stress score
Depression	60.4%	28.0%	32.4%
Anxiety	62.3%	30.2%	32.1%
Stress	65.0%	31.5%	33.5%
OVERALL	62.6%	29.9%	32.7%

Table 4.11: Shows each domainwise, percentage of stress reduction score. Over all they reduced 32.7% of stress score

The above table showed the domain wise stress reduce

In Depression aspect, they got reduced to 32.4% of score

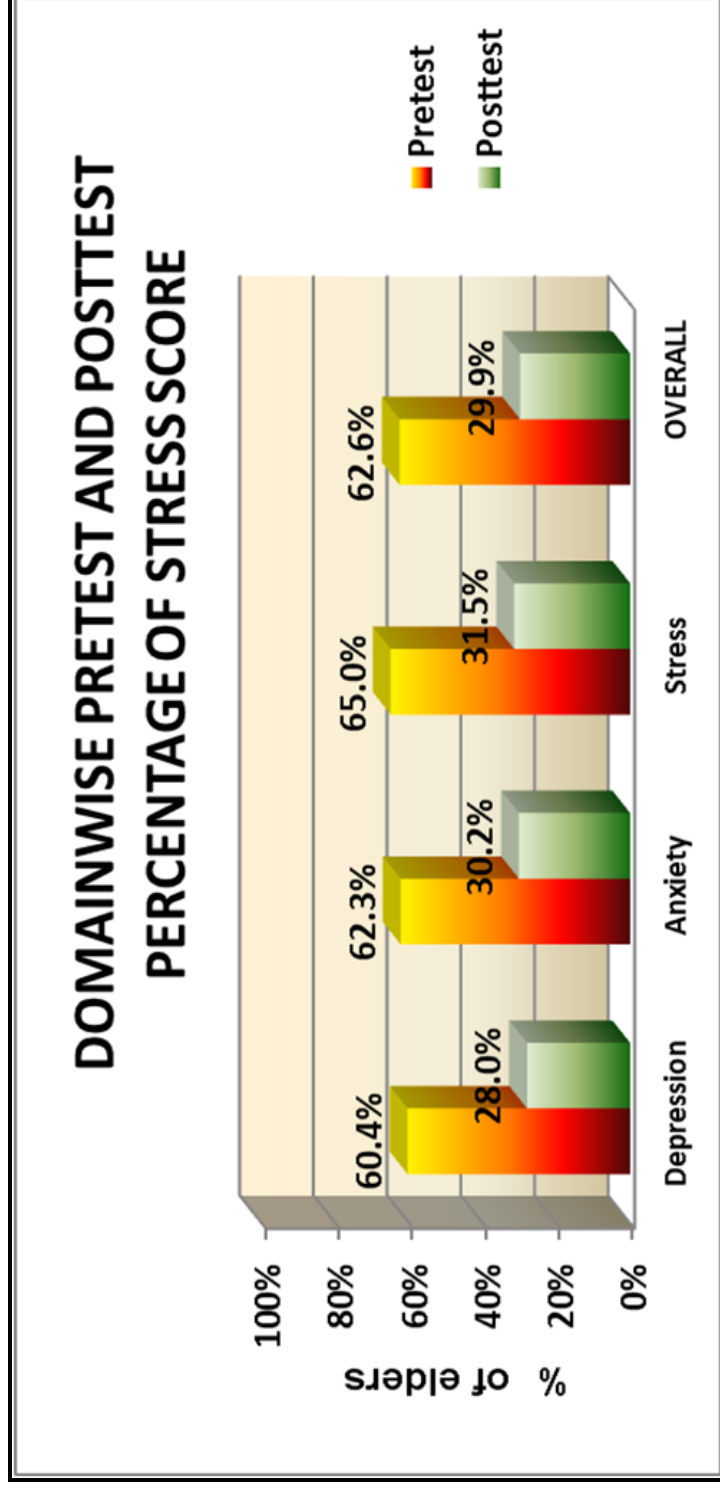
In Anxiety aspect, they got reduced to 32.1% of score

In Stress aspect, they got reduced to 33.5% of score

Overall they 32.7% stress score got reduced when comparing pre-test and post-test score.

This result showed the effectiveness of laughter therapy regarding stress among the elderly people.

FIG 4.16 PERCENTAGE OF STRESS REDUCE AFTER LAUGHTER THERAPY



Overall 29.9% of stress got reduced with pre-test to post-test. These results showed the effectiveness of laughter therapy.

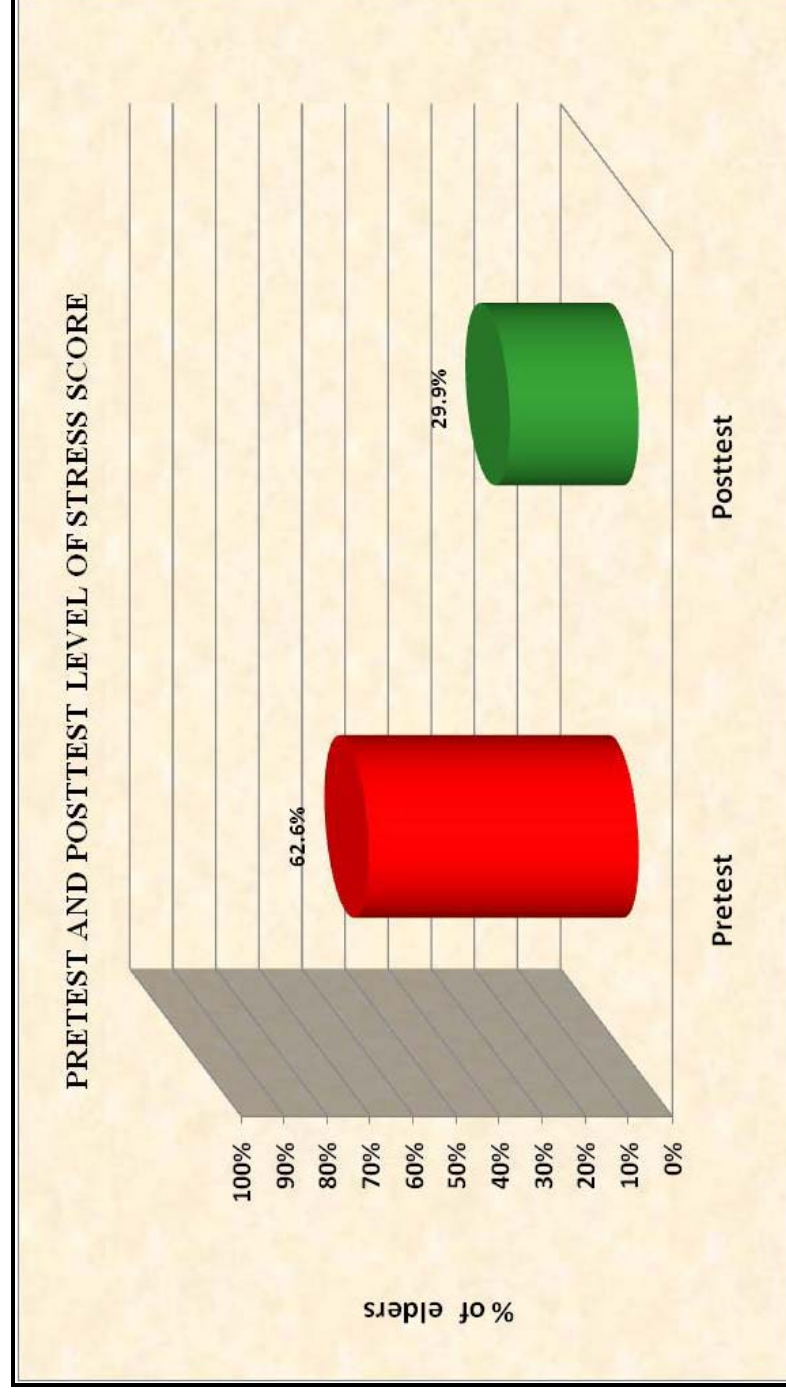
Table-4.12: Effectiveness of Laughter Therapy

	Max score	Mean stress score	Mean Difference in stress with 95% Confidence interval (CI)	Percentage of stress reduction with 95% Confidence interval (CI)
Pre-test	126	78.83	41.11 (36.42 – 45.82)	32.6% (28.9% –36.4%)
Post-test	126	37.72		

Table 4.12 shows the effectiveness of laughter therapy.

The elderly people's stress got reduced 32.6% of score after laughter therapy. This is the net benefit of this study. The effect of the study was analysed by using proportion with 95% CI and means difference with 95% CI.

FIG 4.17. EFFECTIVENESS OF LAUGHTER THERAPY



Post test score (29.9%) was highly significant with 95 % confidence interval.

SECTION VI

Table-4.13: Association Between Pre-Test Level of Stress Score and Elderly People Demographic Variables

Demographic variables		Pre-test level of stress						Total	Chi square test
		Moderate		Severe		Extremely severe			
		N	%	n	%	N	%		
Age	60 - 65 yrs.	5	17.9%	11	39.3%	12	42.9%	28	$\chi^2=2.62$ p=0.63
	66 - 70 yrs.	3	18.8%	4	25.0%	9	56.3%	16	
	> 70 yrs.	1	6.3%	5	31.3%	10	62.5%	16	
Religion	Hindu	9	16.7%	19	35.2%	26	48.1%	54	$\chi^2=4.49$ p=0.34
	Christian					4	100.0%	4	
	Muslim			1	50.0%	1	50.0%	2	
Marital status	Married	2	33.3%	1	16.7%	3	50.0%	6	$\chi^2=3.31$ p=0.76
	Single	2	18.2%	4	36.4%	5	45.5%	11	
	Divorced					1	100.0%	1	
	Widowed	5	11.9%	15	35.7%	22	52.4%	42	
Education	Un educated	3	15.0%	3	15.0%	14	70.0%	20	$\chi^2=6.86$ p=0.33
	Primary	2	16.7%	4	33.3%	6	50.0%	12	
	Higher secondary	4	18.2%	10	45.5%	8	36.4%	22	
	Graduate			3	50.0%	3	50.0%	6	
Occupation	Semi- Government	6	26.1%	9	39.1%	8	34.8%	23	$\chi^2=5.49$ p=0.06
	Private	3	8.1%	11	29.7%	23	62.2%	37	
Financial support	Pensioner	1	14.3%	1	14.3%	5	71.4%	7	$\chi^2=1.46$ p=0.48
	None of the above	8	15.1%	19	35.8%	26	49.1%	53	
Number of children	1 (or) 2	4	25.0%	6	37.5%	6	37.5%	16	$\chi^2=2.60$ p=0.62
	More than 2	2	11.8%	6	35.3%	9	52.9%	17	
	No children	3	11.1%	8	29.6%	16	59.3%	27	
Mode of admission	Referred by trust	2	16.7%	3	25.0%	7	58.3%	12	$\chi^2=1.66$ p=0.80
	Voluntary admission	4	13.8%	12	41.4%	13	44.8%	29	
	From the children / others	3	15.8%	5	26.3%	11	57.9%	19	

Demographic variables		Pre-test level of stress						Total	Chi square test
		Moderate		Severe		Extremely severe			
		N	%	n	%	N	%		
Recreational activities	Watching TV	1	9.1%	4	36.4%	6	54.5%	11	$\chi^2=7.39$ p=0.29
	Reading books			4	57.1%	3	42.9%	7	
	Talking with others	6	26.1%	8	34.8%	9	39.1%	23	
	Others	2	10.5%	4	21.1%	13	68.4%	19	
Duration of the stay	Below one year	2	9.5%	5	23.8%	14	66.7%	21	$\chi^2=7.91$ p=0.25
	2-3 years	4	20.0%	10	50.0%	6	30.0%	20	
	3-5 years	3	20.0%	3	20.0%	9	60.0%	15	
	More than 5 years			2	50.0%	2	50.0%	4	

Table 4.13 shows the association between pre-test level of stress score and their demographic variables. None of the demographic variables are significant. Statistical significance was calculated using chi square test.

Table-4.14: Association Between Posttest Level of Stress Score and Elderly People Demographic Variables

Demographic variables		Post-test level of stress						Total	Chi square test
		Normal		Mild		Moderate			
		N	%	n	%	n	%		
Age	60 - 65 yrs. ’	23	82.1%	3	10.7%	2	7.1%	28	$\chi^2=13.14$ $p=0.01^{**}$
	66 - 70 yrs.	9	56.3%	5	31.3%	2	12.5%	16	
	> 70 yrs.	5	31.3%	5	31.3%	6	37.4%	16	
Religion	Hindu	31	57.4%	13	24.1%	10	18.5%	54	$\chi^2=4.14$ $p=0.39$
	Christian	4	100.0%	0	0.0%	0	0.0%	4	
	Muslim	2	100.0%	0	0.0%	0	0.0%	2	
Marital status	Married	2	33.3%	2	33.3%	2	33.3%	6	$\chi^2=5.35$ $p=0.50$
	Single	5	45.5%	4	36.4%	2	18.2%	11	
	Divorced	1	100.0%	0	0.0%	0	0.0%	1	
	Widowed	29	69.0%	7	16.7%	6	14.3%	42	
Education	Un educated	9	45.0%	4	20.0%	7	35.0%	20	$\chi^2=13.02$ $p=0.05^*$
	Primary	9	75.0%	2	16.7%	1	8.3%	12	
	Higher secondary	13	59.1%	7	31.8%	2	9.1%	22	
	Graduate	6	100.0%	0	0.0%	0	0.0%	6	
Occupation	Semi-Government	13	56.5%	5	21.7%	5	21.7%	23	$\chi^2=0.73$ $p=0.69$
	Private	24	64.9%	8	21.6%	5	13.5%	37	
Financial support	Pensioner	6	85.7%	1	14.3%			7	$\chi^2=2.26$ $p=0.32$
	None of the above	31	58.5%	12	22.6%	10	18.9%	53	
Number of children	1 (or) 2	10	62.5%	5	31.3%	1	6.3%	16	$\chi^2=3.39$ $p=0.50$
	More than 2	12	70.6%	2	11.8%	3	17.6%	17	
	No children	15	55.6%	6	22.2%	6	22.2%	27	
Mode of admission	Referred by trust	10	83.3%	2	16.7%			12	$\chi^2=5.45$ $p=0.24$
	Voluntary admission	17	58.6%	5	17.2%	7	24.1%	29	
	From the children / others	10	52.6%	6	31.6%	3	15.8%	19	

Demographic variables		Post-test level of stress						Total	Chi square test
		Normal		Mild		Moderate			
		N	%	n	%	n	%		
Recreational activities	Watching TV	9	81.8%	2	18.2%			11	$\chi^2=4.24$ $p=0.64$
	Reading books	4	57.1%	2	28.6%	1	14.3%	7	
	Talking with others	12	52.2%	6	26.1%	5	21.7%	23	
	Others	12	63.2%	3	15.8%	4	21.1%	19	
Duration of the stay	Below one year	14	66.7%	6	28.6%	1	4.7%	21	$\chi^2=15.29$ $p=0.01^{**}$
	2-3 years	15	75.0%	2	10.0%	3	15.0%	20	
	3-5 years	8	53.3%	4	26.7%	3	20.0%	15	
	More than 5 years	0	25.0%	1	25.0%	3	75.0%	4	

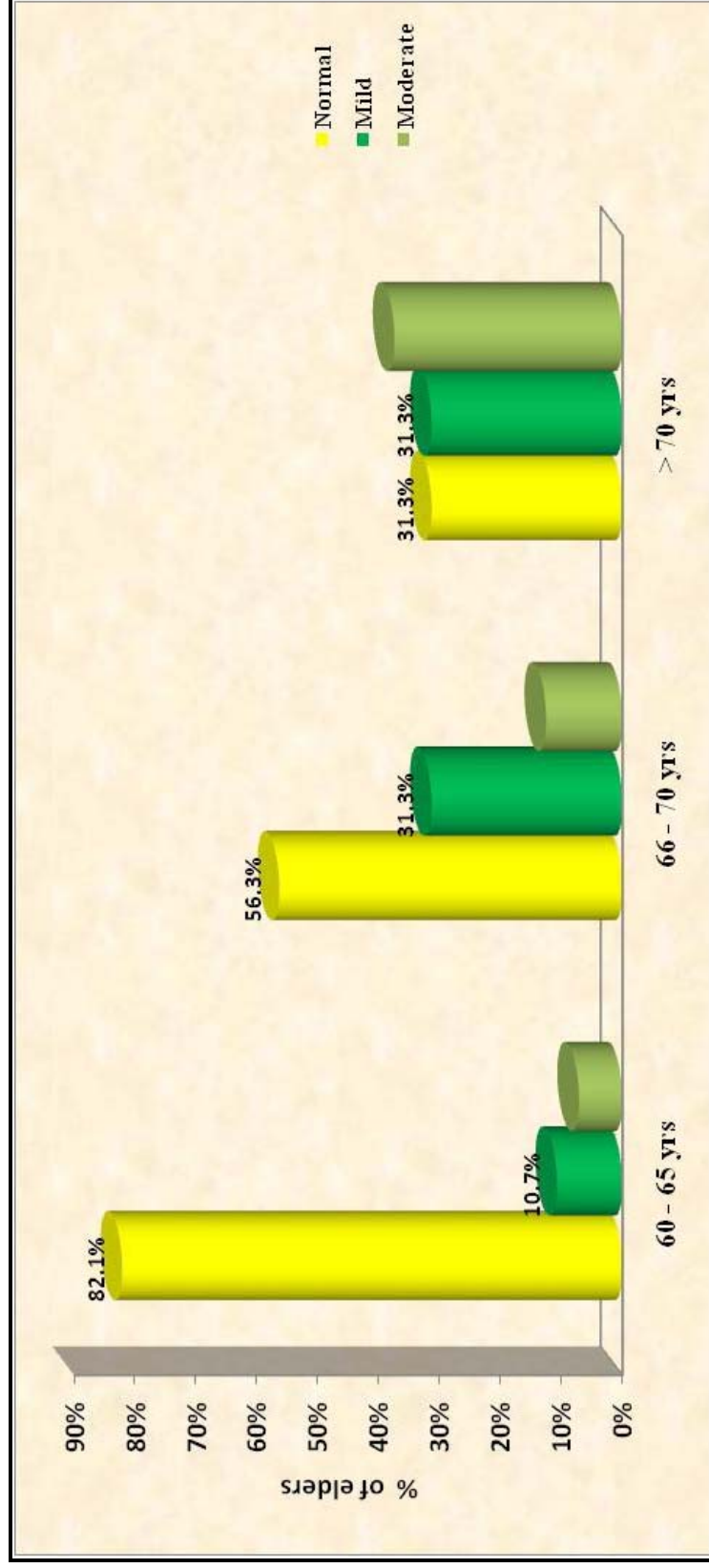
Table no 4.14 shows the association between post-test level of stress reduce score and their demographic variables. Age, education and duration of stay are significant. Statistical significance was calculated using chi square test

STRESS REDUCES SCORE = POST TEST SCORE – PRE TEST SCORE

*Significant at $P < 0.05$ **highly significant at $P < 0.01$ ***
very high significant at $P < 0.001$

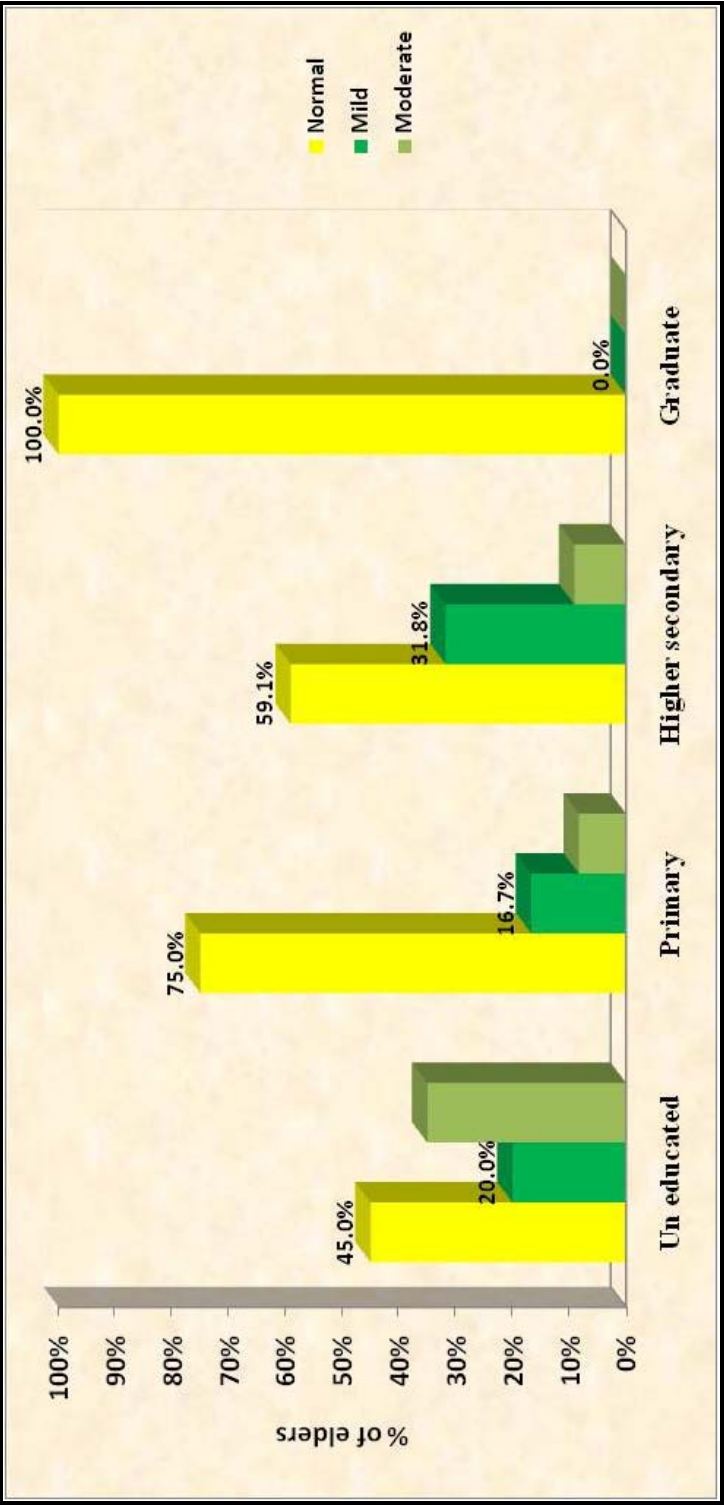
Younger elderly, higher secondary and less duration of stay of some elderly people are having mild stress than other variables. Statistical significance was calculated using chi-square test.

FIG 4.18. ASSOCIATION BETWEEN LEVEL OF STRESS REDUCE SCORE WITH THE AGE OF THE ELDERLY PEOPLE



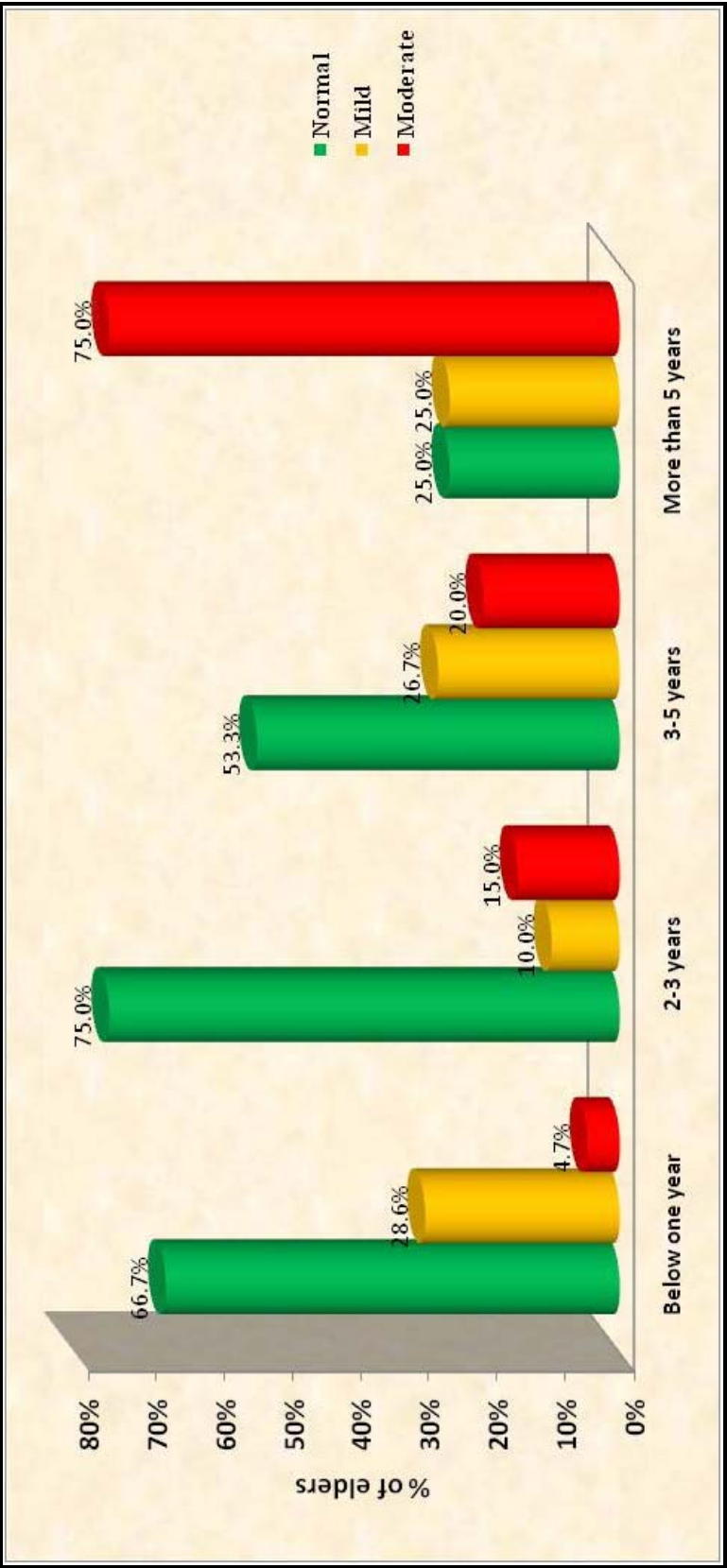
It shows that elderly people's stress had got reduced (82.1 %)

FIG 4.19 ASSOCIATION BETWEEN LEVEL OF STRESS REDUCE SCORE AND EDUCATIONAL STATUS



It shows that graduate (100%) and primary education (75.5 %) had reduced more of their stress

FIG 4.20. ASSOCIATION BETWEEN LEVEL OF STRESS REDUCE SCORE AND DURATION OF STAY IN OLD AGE HOME



It shows that elderly people who were staying for more than five years had reduced more stress (75.0%)

CHAPTER-V DISCUSSION

“Humor is the prelude to faith, and laughter is the beginning of prayer”.

-Reinhold Niebuhr

This chapter deals with detailed description of the study findings gathered from the statistical analysis.

Stress is one of the major health issues of the elderly people. It has a significant long-term effect on individual, family and community. Understanding the effects of stress is the first important step towards addressing an issue. The data is gathered from the elderly people who revealed the negative aspects of stress and importance of laughter therapy.

The data was statistically analyzed and the finding was discussed under the objectives formulated by the researcher.

Section-I Socio demographic profile of the elderly people

Section-II Stress level of the elderly people before laughter therapy intervention.

Section-III Stress level of the elderly people after laughter therapy intervention

Section-IV Effectiveness of laughter therapy

Section-V Associate the effectiveness of laughter therapy with selected demographic variables.

The first objective of this study is to describe the socio demographic profile of the elderly people

Table 4.1 described the socio demographic profile of the elderly people. Among the elderly people, higher proportion (46.6 %) of the elderly people belongs to the age group of 60- 65 years. Religion wise most (90.0%) of the elderly people were Hindu. As far as the educational status of the elderly people is concerned, higher proportion (36.7%) of the elderly people had higher secondary. Most of them (70.0%) were widowed. According to their occupational status, mostly (61.7%) they are belongs to private. Higher proportion (88.3%) of the elderly people had no sources of financial support and they belong to the Old Age Home only. Among the respondents, almost half of the people (45.0%) had no children. Most of the elderly people (48.3%) got admitted into the old age home by their own. As per their recreational activities, the higher proportions of the elderly (38.3%) were willing to talking with others. Higher proportions of the elderly people (35.0%) who were staying at the Old Age Home nearly below one year.

My study consistent with this study conducted by ***Jariwala Vishal (2010)*** on elderly belonging to different socioeconomic and varying demographic groups of Surat city. A total of 105 elderly people were interviewed comprising of 35 people each from the elderly living in the Old Age Home. They are living in the affluent areas and living in the slums of city. A probability sample was obtained by approaching all the subjects in a consecutive manner. The prevalence of stress was moderately high 39.04% among the elderly in their study population and it was observed that several important socio demographic variables had shown a significant association with stress in the elderly as follows 46.67% of elderly age group between 55- 65 years, 70% of them were female, 83.34 % of them belongs to Hindu, 63.34% of elderly had higher secondary, 66.7% of them were married, 80% of people from nuclear

family and 23.33% of them was pensioner. The study revealed that there would be 6% to 50% prevalence rates on stress in the community samples of the elderly in India.

The second objective of this study is to assess the level of stress among the elderly people before the laughter therapy

Table 4.2 shows the result of domainwise percentage before laughter therapy and the overall stress score is 62.6%. The elderly people had negative emotions pertaining to stress is 65.0% and less negative emotions regarding depression is 60.4%. In general 50.7% of the elderly people had extremely severe level of stress, 30% of them had severe stress, 13.3% of them had moderate stress, and 3.3% of them had mild stress and 1.6% of elderly were normal.

My study consistent with this study which is conducted by ***Mrs.Dalbirkaur (2014)*** on laughter therapy among elderly people with stress. It is observed in pretest of experimental group 1 (3.3%), 0, 29 (96.66%) subjects' falls in mild moderate, severe stress respectively. Control group has 1 (3.3%), 2 (6.6%) and 27 (90%) mild, moderate and severe level. In posttest, there was no decrease level of stress among control group 1 (6.6 %) moderate 29 (96.66 %) severe whereas elderly people increased in moderate 16 (53.33 %) and mild 9 (30 %) as compared to pretest of experimental group after laughing session 20-25 minutes daily for 15 days. Only 5 (16.6 %) elderly people remained in severe stress after laughter therapy. It shows that shifting of samples in various level of stress due to laughter therapy in experimental group only.

The third objective of this study is to assess the level of stress among the elderly people after the laughter therapy.

Table 4.6 shows the level of stress score after the laughter therapy. 1.6% of them had extremely severe stress whereas the stress

score was 50.7% and 20.7% of them had mild stress and 14.6% of them had moderate stress level. Finally 61.7 % of the elderly people were normal.

My study consistent within a study conducted by ***LaughterYoga International (2006)*** which focussed on measuring changes in stress level before and after 3 weeks of unconditioned laughter sessions. It was done for the 120 staffs who were working at 3 separate IT companies. Researchers carefully measured the physical, psychological and emotional indicators of stress. The stress was assessed by structured scale. The laughter group showed a significant decrease in stress level (63.7 %) reflected in decreased heart rate (23.1 %) , low blood pressure (15.4 %), reduced cortisol levels (50.5 %) and 11% decrease in perceived stress levels. Other indicators confirmed that all participants showed significantly lower stress level after 3 weeks of laughter sessions

The fourth objective of this study is to determine the effectiveness of laughter therapy regarding the stress level of elderly people.

Table 4.12 & 4.13: show the effectiveness of laughter therapy. The overall pretest score among the elderly people was 78.83 with standard deviation of ± 15.71 and in posttest, it was 37.72 with standard deviation of ± 5.51 . So the differences are large and it showed statistically significant difference ($P \leq 0.001$) in paired test.

My study consistent with a study which was conducted by ***Shahidi et al (2010)*** on laughter yoga versus group exercise program among elderly people with stress. A randomized controlled trial. He assessed effectiveness of laughter with geriatric stress score. Researcher has found that there was changes in stress score (reduced 38.88) that individual in both laughter therapy and exercise therapy group showed significant improvement in their score ($p < 0.001$) for laughter therapy

versus control group and($p < 0.01$) for exercise therapy versus control group. No significant difference between two experimental group ($p = 0.4$). To control the effectiveness of pre and post stress score.

The fifth objective of this study is to associate the level of stress with selected socio demographic variables

Table 4.15 shows that the level of stress is reduced with their demographic variables. Variables like age of elderly people, educational status and duration of stay showed statistically significant association.

My study consistent with this study which was conducted by ***Mrs. Dalbir kaur (2014)*** on laughter therapy among elderly people with stress. The association of stress and laughing with selected socio demographic variables such as age, gender, religion, marital status, type of family and economical support was statistically non-significant except gender, education and duration of stay in the pretest of experimental group. It was found association with the laughing at the level of 5% that is $2.52 > 1.960$ means females have more level of stress than male of the study sample. The experimental group has shown a dramatic change in the level of stress compared to control group by laughter therapy at selected old age home.

CHAPTER-VI

SUMMARY, CONCLUSION, IMPLICATION AND RECOMMENDATION

“The world we have created is a product of our thinking; it cannot be changed without changing our thinking”

-Albert Einstein

This is the most creative part of this study .This chapter gives a brief account of the present study including summary, finding and conclusion draw from the findings, limitations, recommendations and nursing implications

6.1.SUMMARY

“You do not heal old age, you protect it, You promote it and you extend it”

- Sir James Sterling

Stress is a state of being under pressure. In modern usage stress refers to being under a great deal of emotional, mental and social pressure for a prolonged period of time. The aging process can be considered as stressful if they require the great deal of concentration for a continued period of time. Social environment and situation is also considered stressful if there is lot of obstacles to communication and mutual tolerance. There is only 24 hours per day so laughter therapy is an efficient way to reduce stress in everyday life. It reprioritizes the goals and activities of the life which focuses on what is truly important and lets the trivial ones go.

So the researcher conducted a study to assess the effectiveness of laughter therapy to reduce stress among elderly people in selected Old Age Home at Chennai. The data was collected for 4 weeks in selected Old Age Home, Chennai from 10. 2. 2015 to 6.3. 2015. The collected

data was analyzed by using the descriptive statistics (percentage, mean, standard deviation) and inferential statistics (student paired t test and chi square test). The study findings were discussed based on the objectives.

6.2. MAJOR FINDINGS OF THE STUDY

6.2.1. Findings of socio demographic profile of the elderly people

- ❖ Among the elderly people, higher proportion (46.6 %) of the elderly people belongs to the age group of 60- 65 years.
- ❖ Religion wise, most (90.0%) of the elderly people were Hindu.
- ❖ As far as the educational status of the elderly people is concerned, higher proportion (36.7%) of the elderly people had higher secondary.
- ❖ Most of them (70.0%) were widowed.
- ❖ According to their occupational status, mostly (61.7%) they are belongs to private.
- ❖ Higher proportion (88.3%) of the elderly people had no sources of financial support and they belong to the old age home only.
- ❖ Among the respondents, almost half of the people (45.0%) had no children.
- ❖ Most of the elderly (48.3%) got admitted into the Old Age Home on their own.
- ❖ As per their recreational activities, the higher proportions of the elderly (38.3%) were willing to talk with others.
- ❖ Higher proportions of the elderly people (35.0%) who were staying at the Old Age Home nearly below one year.

6.2.2 Finding the stress level of elderly people before laughter therapy

Before administering the laughter therapy, they had more score in stress (65%) and less score in depression (60.4%) overall their score was 62.6%. Grading of the stress level before laughter therapy was moderate (15%) and 33.3% of them had severe stress and 51.7 % of them had extremely severe stress.

6.2.3. Finding the stress level of elderly people after laughter therapy

In the post-test domainwise percentage of stress level of the elderly people after laughter therapy was depicted in table 4.4 was 28.0 % score in depression. Almost equal number of elderly people scored 30.2 % in anxiety and 31.5 % in stress. Overall. Percentage of stress score was 29.9%.

In post-test, the stress level of elderly people after laughter therapy, 1.6% of them had extremely severe, 3.3% of them had severe stress, 13.3% of them had moderate stress, 20% of them had mild stress and 61.7% of them are normal.

In comparing mean stress score, the differences between pre-test and post-test was large and it was statistically significant ($P = 0.001$). Overall stress score of elderly people between pre-test and post-test difference is 17.50 which is statistically significant.

6.2.4 Finding the effectiveness of laughter therapy with regard to stress level in elderly people

The pre-test and post-test level of stress among elderly people before laughter therapy, 1.6% of them are normal, 3.3% of them are mild. 13.3% of the elderly had moderate stress, 30% of them had severe stress and 51.7% of them had extremely severe stress. After laughter therapy, 1.6% of the elderly had extremely severe, 3.3% of them had severe stress, 13.3% of them had moderate stress, 20% of them had mild

stress and 61.7% of them are normal. The post-test stress score had statistically very highly significance.

The comparison of overall stress score between pre-test and post-test, elderly people reduced 32.6% of stress after laughter therapy. Differences between pre-test and post-test score was analyzed using proportion with 95% CI and mean differences with 95% CI. This results showed that the effectiveness of the laughter therapy.

6. 2.5. Finding of an association of stress with the selected demographic variables

There is a close association in the level of stress reduction and their demographic variables like age of elderly, educational status and duration of stay statistically significant.

6.3 IMPLICATION OF THE STUDY

The finding of the study has implications for nursing education, nursing practice, nursing research and nursing administration.

6.3.1. Nursing Education

- ❖ Nursing curriculum focuses to develop skills in identifying the stress level and its management.
- ❖ Conferences, workshops and seminars can be held for nurses to reduce stress and positive attitude.
- ❖ Arrange in-service education to update their knowledge regarding stress reduction measures.
- ❖ Make available literature related to laughter therapy.
- ❖ Arrange the CAM and AYUSH programme

6.3.2. Nursing Practice

- ❖ Psychiatric nurse must have the skills in teaching about stress reduction measures.
- ❖ Self-instructional material regarding reduction of stress can be distributed to the people.
- ❖ The nurse must have the skills to avoid manual pressure.
- ❖ There is no need for any specific preparation to provide laughter therapy.
- ❖ Arrange laughter club weekly once.

6.3.3 Nursing Research

- ❖ This study will be a valuable reference material for further researcher.
- ❖ The results of study encourage the management to adopt laughter therapy for relieving stress.
- ❖ Adequate allocation of funds, manpower, time, adequate training should be provided to the nurses for conducting this research.
- ❖ Research can be done to find out the effectiveness of laughter therapy which helps to reduce stress among elderly people.

6.3.4. Nursing Administration

- ❖ Proposed to health administration to strategically plan and meet the health needs of risk group.
- ❖ The administration both private and Govt sectors should take initiatives to relieve stress.

- ❖ The administration can encourage the nurses for conducting research aspects for prevention of stress.
- ❖ The administration can organize conferences, workshops and seminars for nurses working in the hospital and other health care setting.

6.4 RECOMMENDATION

Keeping in view, the finding of the present study can be used as a guide for future research.

- ❖ A similar study can be replicated with on a large sample in different setting
- ❖ A similar study can be conducted to assess the effectiveness of other complimentary therapies on stress.
- ❖ A longitudinal study can be undertaken to find out the long term effect of laughter therapy on stress.

6.5. LIMITATION OF THE STUDY

- ❖ The study was limited to the elderly people.
- ❖ The study was limited to the selected Old Age Home at Chennai.
- ❖ The elderly people who were to participate in the study.
- ❖ The data collection was restricted only for 4 weeks.
- ❖ The stress level was assessed based on the score obtained.

6.6. CONCLUSION

Education in evidence based care gives the opportunity to nurses to improve their ability to use theoretical knowledge in practice.

Stress is the factors which causes more psychological problems in our life. It occurs when a person has difficulty dealing with life situations, problems and goals. Each person handles stress differently; someone can thrive in a situation that creates great distress for another.

This study concluded that nurse's role in managing the stress is mandatory. Through laughter therapy, the elderly people's stress had got reduced 32.6%. So this reduction in stress level reflects the effectiveness of laughter therapy. So the nurses should educate the elderly people to understand the causes of stress in old age and advantages of laughter therapy.

This chapter enlightens the importance of this research and reveals that the reduction in the level of stress among elderly people is significant.

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INSTITUTIONAL ETHICS COMMITTEE
MADRAS MEDICAL COLLEGE, CHENNAI-3

EC Reg No.ECR/270/Inst./TN/2013
Telephone No. 044 25305301
Fax : 044 25363970

CERTIFICATE OF APPROVAL

To

Mrs. E. ELAMATHI, M.Sc. Nursing
Madras Medical College,
Chennai – 600 003.

Dear Mrs. E. ELAMATHI, M.Sc. Nursing


The Institutional Ethics Committee has considered your request and approved your study titled **"A study to assess the effectiveness of Laughter therapy in reduction of stress, among elderly people at the selected old age home at Chennai " No. 56082014.**

The following members of Ethics Committee were present in the meeting held on 05.08.2014 conducted at Madras Medical College, Chennai-3.

- | | |
|--|----------------------|
| 1. Dr.C.Rajendran, M.D., | : Chairperson |
| 2. Dr.R.Vimala, M.D., Dean, MMC, Ch-3 | : Deputy Chairperson |
| 3. Prof.B.Kalaiselvi, M.D., Vice-Principal, MMC, Ch-3 | : Member Secretary |
| 4. Prof.R.Nandhini, M.D., Inst.of Pharmacology, MMC | : Member |
| 5. Dr.G.Muralidharan, Director Incharge, Inst.of Surgery | : Member |
| 6. Prof.K.Ramadevi, Director i/c, Inst.of Biochemistry, MMC | : Member |
| 7. Prof.Saraswathy, M.D., Director, Pathology, MMC, Ch-3 | : Member |
| 8. Prof.Tito, M.D., Director i/c, Inst.of Internal Medicine, MMC | : Member |
| 9. Thiru S.Rameshkumar, Administrative Officer | : Lay Person |
| 10. Thiru S.Govindasamy, B.A., B.L., | : Lawyer |
| 11. Tmt.Arnold Saulina, M.A., MSW., | : Social Scientist |

We approve the proposal to be conducted in its presented form.

The Institutional Ethics Committee expects to be informed about the progress of the study and SAE occurring in the course of the study, any changes in the protocol and patients information/informed consent and asks to be provided a copy of the final report.


Member Secretary, Ethics Committee
MEMBER SECRETARY
INSTITUTIONAL ETHICS COMMITTEE
MADRAS MEDICAL COLLEGE
CHENNAI-600 003

Ref No:

KAAKKUM KARANGAL OLD AGE HOME
New No.47, Old No.11,
East Mada Street, Thiruvanniyur
(Near Teppakulam) Chennai-600 011.

Sub : Kaakkum Karangal old age home, Chennai-41, II Year M.Sc.(N) Student- Data collection Permission- regarding.

Ref : Letter Ref. cited. No Dated from the Principal, College of Nursing, Madras Medical College, Chennai-03.

With reference to your letter cited. I am to inform that the permission is granted for Mrs. E. Elamathi, M.Sc. Nursing II year student, College of Nursing, MMC, Chennai-03, proposed to conduct on this topic **"A study to assess the effectiveness of laughter therapy in reduction of stress among elderly people at selected old age home in Chennai"**, as a requirement of dissertation study. The permitted study period from 10.2.15 to 9.3.15

To

Mrs. E. Elamathi,
M.Sc. Nursing II year,
College of Nursing, Madras Medical College,
Chennai-03.

DIRECTOR
For KAAKKUM KARANGAL

Founder

Copy to

1. The principal,
College of Nursing,
Madras Medical College, Chennai-3


CERTIFICATE FOR CONTENT VALIDITY

This is to certify that the tool constructed by Ms.E.Elamathi M.Sc. Nursing II year, College of Nursing, Madras Medical College which is to be used in her study titled **"A study to assess the effectiveness of laughter therapy in reduction of stress among elderly people at selected old age home in Chennai"** has been validated by the undersigned. The suggestions and modifications given by me will be incorporated by the investigator in concern with their respective guide. Then she can proceed to do the research.

NAME : Dr. Ranganathan

DESIGNATION: Assistant professor

COLLEGE : Rajiv Gandhi Govt. General Hospital


SIGNATURE WITH SEAL
Assistant Professor of Psychiatry
Department of Psychiatry,
Rajiv Gandhi Govt. General Hospital,
Chennai - 600 003.

PLACE: Chennai

DATE: 29.1.2015

CERTIFICATE FOR CONTENT VALIDITY

This is to certify that the tool constructed by Ms.E.Elamathi M.Sc. Nursing II year, College of Nursing, Madras Medical College which is to be used in her study titled **"A study to assess the effectiveness of laughter therapy in reduction of stress among elderly people at selected old age home in Chennai"** has been validated by the undersigned. The suggestions and modifications given by me will be incorporated by the investigator in concern with their respective guide. Then she can proceed to do the research.



SIGNATURE WITH SEAL

NAME : B. SUDHAKARAN

DESIGNATION: Asst. Prof of Psychology

COLLEGE : Institute of Mental Health

B. SUDHAKARAN, M.A., M.Phil(Cl.Psy).
RCI Registration No: AOT647
Assistant Professor of Psychology cum
Clinical Psychologist,
Institute of Mental Health, Chennai-10.

PLACE: Chennai

DATE: 6/1/15

CERTIFICATE FOR CONTENT VALIDITY

This is to certify that the tool constructed by Ms.E.ElamathiM.Sc. Nursing II year, College of Nursing, Madras Medical College which is to be used in her study titled "A study to assess the effectiveness of laughter therapy in reduction of stress among elderly people at selected old age home in Chennai" has been validated by the undersigned. The suggestions and modifications given by me will be incorporated by the investigator in concern with their respective guide. Then she can proceed to do the research.

NAME : MRS. GRACE SAMUEL

DESIGNATION: VICE PRINCIPAL & PROFESSOR
MENTAL HEALTH NURSING

COLLEGE : MADHA COLLEGE OF NURSING,
KUNDRATHUR,
CHENNAI - 69

PLACE: CHENNAI

DATE: 04.02.2015

Deved
4/2/2015
SIGNATURE WITH SEAL
VICE PRINCIPAL
MADHA COLLEGE OF NURSING
MADHANAGAR, KUNDRATHUR,
CHENNAI - 600 069
PHONE : 24780738



T.R. KANNAN B.Sc., DATLs.
Chief Accounts Officer, Treasury Officer (Retd)
Secretary

Mobile : 98400 35988

**MARINA BEACH LAUGHTER CLUB OF INTERNATIONAL MARINA CHAPTER
& WALKERS ASSOCIATION**

34/5, Triplicane High Road, Chennai - 600 005.
Ph : 044-2858 3805, Email : kannantr52@yahoo.com

Date : 2.01-2015

CERTIFICATE

THIS IS TO CERTIFY THAT MRS.E.ELAMATHI, MSC (NURSING) II YEAR, COLLEGE OF NURSING,
MADRAS MEDICAL COLLEGE, CHENNAI HAS UNDERGONE THE LAUGHTER THERPAHY TRAINING
CONDUCTED BY LAUGHTER CLUB INTERNATIONAL, TRIPLICANE CHAPTER FROM 01.12.2014 TO
31.12.2014.

THE TRAINING PROGRAMME COVERED THE BASICS OF LAUGHTER THERPAHY METHODS AND
CONCEPTS OF LAUGHTER THERPAHY.

DURING THE TRAINING PROGRAMME HER PERFORMACE WAS VERY GOOD.

PLACE: CHENNAI

DATE: 02.01.2015

FOR LAUGHTER CLUB INTERNATIONAL


T.R.KANNAN, SECRETARY

CERTIFICATE OF ENGLISH EDITING

This is to certify that the study conducted by Ms.E.Elamathi, M.Sc Nursing II year, College of Nursing, Madras Medical College, Chennai-03, on the topic " **A STUDY TO ASSESS THE EFFECTIVENESS OF LAUGHTER THERAPY IN REDUCTION OF STRESS AMONG THE ELDERLY PEOPLE AT SELECTED OLD AGE HOME AT CHENNAI** " has been edited by me for English language appropriateness.

Signature : M. Dhanalakshmi

Name : M. DHANALAKSHMI

Designation : ASSISTANT PROFESSOR
DEPARTMENT OF ENGLISH

Place : MADRAS MEDICAL COLLEGE
CHENNAI 2600 003

Seal :

APPENDIX -1

SECTION – A

SOCIO DEMOGRAPHIC DATA OF THE ELDERLY PEOPLE

Read the following question and put a tick mark (√)

1. Age in years
 - a) 60-65 years
 - b) 65 -70 years
 - c) 70 above
2. Religion
 - a) Hindu
 - b) Christian
 - c) Muslim
 - d) Others
3. Marital status
 - a) Married
 - b) Single
 - c) Divorced
 - d) Widowed
4. Education
 - a) Un- educated
 - b) Primary
 - c) Higher secondary
 - d) Graduate
5. Occupation
 - a) Government
 - b) Semi- Government
 - c) Private
 - d) Others/ business

6. Financial support
 - a) OAP (Old age pension)
 - b) Pensioner
 - c) Any other support/ Receiving from children
 - d) None of the above
7. Number of children
 - a) 1 (or) 2
 - b) More than 2
 - c) No children
8. Mode of admission
 - a) Referred by trust
 - b) Voluntary admission
 - c) From the children / others
9. Recreational activities
 - a) Watching TV
 - b) Reading books
 - c) Talking with others
 - d) Others
10. Duration of stay
 - a) Below one year
 - b) 2-3 years
 - c) 3-5 years
 - d) More than 5 years

SECTION –B

Questionnaire on assessing the stress level of elderly people

Name: _____

Date: _____

Please read each statement and circle a number 0, 1, 2 or 3 which indicates how much the statement applied to you *over the past week*. There are no rights or wrong answers. Do not spend too much time on any statement.

The rating scale is as follows:

0 - Did not apply to me at all

1 - Applied to me to some degree, or some of the time

2 - Applied to me to a considerable degree, or a good part of time

3- Applied to me very much, or most of the time

1	I found myself getting upset by quite trivial things	0 1 2 3
2	I was aware of dryness of my mouth	0 1 2 3
3	I couldn't seem to experience any positive feeling at all	0 1 2 3
4	I experienced breathing difficulty (eg, excessively rapid breathing, breathlessness in the absence of physical exertion)	0 1 2 3
5	I just couldn't seem to get going	0 1 2 3
6	I tended to over-react to situations	0 1 2 3
7	I had a feeling of shakiness (e.g., legs going to give way)	0 1 2 3
8	I found it difficult to relax	0 1 2 3
9	I found myself in situation that made me so anxious I was most relieved when they ended	0 1 2 3
10	I felt that I had nothing to look forward to	0 1 2 3

11	I found myself getting upset rather easily	0 1 2 3
12	I felt that I was using a lot of nervous energy	0 1 2 3
13	I felt sad and depressed	0 1 2 3
14	I found myself getting impatient when I was delayed in any Way (eg, lifts, traffic lights, being kept waiting.	0 1 2 3
15	I had a feeling of faintness	0 1 2 3
16	I felt that I had lost interest in just about everything	0 1 2 3
17	I felt I wasn't worth much as a person	0 1 2 3
18	I perspired noticeably (e.g., hands sweaty) in the absence of high temperatures or physical exertion	0 1 2 3
19	I felt scared without any good reason	0 1 2 3
20	I felt that life wasn't worthwhile	0 1 2 3
21	I found it hard to wind down	0 1 2 3
22	I had difficulty in swallowing	0 1 2 3
23	I couldn't seem to get any enjoyment out of the things I did	0 1 2 3
24	I was aware of the action of my heart in the absence of physical exertion (eg, sense of heart rate increase, heart missing a beat)	0 1 2 3
25	I felt down-hearted and blue	0 1 2 3
26	I found that I was very irritable	0 1 2 3
27	I felt I was close to panic	0 1 2 3
28	I found it hard to calm down after something upset me	0 1 2 3
29	I feared that I would be "thrown" by some trivial	0 1 2 3

	but unfamiliar task	
30	I was unable to become enthusiastic about anything	0 1 2 3
31	I found it difficult to tolerate interruptions to what I was doing	0 1 2 3
32	I was in a state of nervous tension	0 1 2 3
33	I felt I was pretty worthless	0 1 2 3
34	I was intolerant of anything that kept me from getting on with what I was doing	0 1 2 3
35	I felt terrified	0 1 2 3
36	I could see nothing in the future to be hopeful about	0 1 2 3
37	I felt that life was meaningless	0 1 2 3
38	I found myself getting agitated	0 1 2 3
39	I was worried about situations in which I might panic and make a fool of myself	0 1 2 3
40	I experienced trembling (eg, in the hands)	0 1 2 3
41	I found it difficult to work up the initiative to do things	0 1 2 3
42	I found myself getting upset by quite trivial things	0 1 2 3

LAUGHTER THERAPY

SELF INTRODUCTION

Good morning I am doing my MSc.,(Nursing) Mental healthNursing. As a part of my degree I am conducting a research about the effectiveness of laughter therapy in reduction of stress among elderly people. Today I will be explaining the benefits of laughter therapy. By practising this, it will be benefit you and I request you all to cooperate with me.

INTRODUCTION ABOUT LAUGHTER THERAPY

A typical laughter therapy session is a perfect blend of various stimulated laughter techniques interspersed with breathing and stretching exercises. Direct eye contact is the key to induce further laughter. When participants look at each other faces and do this exercise. It will generate natural laughter as everyone has peculiar style of laughing. The overall session is 45 to 50 minutes

MEANING

It means therapeutic use of humor to improve emotional well-being in order to facilitate improvement of health status. **-Medical dictionary**

INDICATION

- Physical, mental and emotional stress
- Hypertension
- Heart disease
- Diabetes
- Depression
- Allergies
- Asthma
- Bronchitis

- Backache
- Fibromyalgia
- Migraine
- Menstrual disorder
- Cancer and many others

CONTRA INDICATION

It is quite vigorous and can leave you feel light headed especially if you laugh lying down. Those who have to constant a doctor before taking part are :

- Recently had surgery
- Glaucoma
- Hernias
- Hemorrhoids
- Pregnant

BENEFITS OF LAUGHTER THERAPY

Physical health benefits

- Boosts immunity
- Lowers stress hormone
- Decreases pains
- Relaxes your muscles
- Prevents heart diseases

Mental health benefits

- Adds joy and zest for your life
- Eases anxiety and fear
- Relieve stress
- Improve mood

Social benefits

- Strengthen relationships
- Attract others
- Enhances team work
- Helps defuse conflict
- Promotes group bonding

TYPES

There are more than 50 types of different laughter therapies. Some of them are as follows

- **Basic laughter**

Normally it is performed more or less every day and all the other laughter therapies are based on this.

- **Warm up laughter / Patiala laughter**

Ho-Ho-Ha-Ha-Ha chanting. This is done regularly and the speed of chanting is increased with gradual hand movements and finally breaks down with family laughter.

- **Spontaneous laughter**

- **Mumbai / office/ etiquette laughter**

- **Jokers laughter**

- **Laughter yoga – Namesake laughter**

- **Festival laughter – kite flying, holy**

- **Social and other laughter - mobile, greeting, apology, appreciation etc.**

STEPS OF LAUGHTER THERAPY

1. **Deep Breathing Exercises**

2. **Rhythmic clapping and warming up exercises**

3. **Ho- Ho- Ha -Ha -Ha chanting**

- 4. Laughter exercises**
 - a. Yogic laughter exercises**
 - b. Playful laughter exercises**
 - c. Value based laughter exercises**
- 5. Playful laughter techniques**
- 6. Closing technique.**

DEEP BREATHING EXERCISES

Laughter exercises are interspersed with deep breathing exercises which help to flush the lungs as well as bring physical and mental relaxation. A typical deep breathing exercise should be done from a relaxed standing position and bending the waist to a point where you are comfortable. Exhale through the mouth to fully empty your lungs, straighten up slowly while inhaling through your nose and take a deep breath as possible.as you can. Raise your arms to the sky, stretch your body slightly backward and hold your breath for 4-5 seconds. It helps to increase the vital capacity of the lungs and helps in producing laughter.

CLAPPING AND WARMING UP EXERCISES

We clap with our hands parallel to each other by finger to finger and palm to palm contact. It stimulates acupressure points in our hands and increases the energy level. Then we should add a rhythm while clapping; The synchronical rhythm is 1-2, 1-2-3. It increase the energy levels.

HO- HO- HA- HA -HA CHANTING

This is done by group along with rhythmic clapping or with arm movements or without clapping. It is based on yogic-dynamic breathing techniques. It charges the whole atmosphere with laughter .Since everyone can easily participate in this exercise each one feels a sense of achievement.This also helps them to shed their inhibitions.

LAUGHTER EXERCISES

It divided into three types

a. Yogic laughter exercises

Some exercises are based on yogic breathing (pranayama) and few are based on yogic posture including the popular lion laughter method performed with growling laughter.

b. Playful laughter exercises

This is help to reduce inhibition and shyness and to convert the stimulated laughter into unconditional laughter. They often include method acting techniques to shift our mind set. Imaging and acting out a situation or a role is done in this method.E.g One meter laughter, milkshake laughter, Mobile phone laughter and hot soup laughter are especially popular.

c. Value - based laughter exercises

A special meaning is attached to certain gestures made while laughing so that the subconscious mind registers its deep values that helps to develop a positive attitude like appreciation laughter, greeting laughter, forgiveness laughter therapy, shake-hand laughter therapy, hugging laughter, guru Laughter.

PLAYFUL LAUGHTER TECHNIQUES

Very good (clap), very good (clap) yeah (swimming arms up into a Y shape with thumbs in childish exuberance and exhilaration) this will help you to keep the energy level and build up the enthusiasm.

CLOSING TECHNIQUE

At the end of the session, three slogans are chanted. The anchor person delivers the first punch line by saying “we are the happiest people in the world ” everyone in the group

raises their arms and says “y-e-s”. “We are the healthiest people in the world”. “Y-e-s”. “We are laughter club members. ‘Y-e-s”

After the slogans all the members stretch their arms out towards the sky close their eyes and pray in silence for 30 to 60 seconds for World Peace. So Ho- Ho- Ha- Ha- Ha. Learn this art of living through laughter.

APPLICATION OF LAUGHTER THERAPY IN STRESS

Laughing is an excellent way to reduce stress in our lives and can help you to cope with and survive a stressful lifestyle.

It provides a full scale workout for your muscles and unleashes a rush of stress busting endorphins. Since our bodies cannot distinguish between real and fake laughter anything that make you giggle will have a positive impact

APPLICATION OF LAUGHTER THERAPY ON DEPRESSION

Laughter therapy creates a positive state of mind. It fosters a positive and helpful attitude with increased optimism. Laughter can ameliorate the undesirable effects of stress hormones, mainly by enhancing the secretion of growth hormones. It promotes the same immune response that cortisol and epinephrine tend to inhibit.

APPLICATION OF LAUGHTER THERAPY IN ELDERLY PEOPLE

Old age is prone to frequent bouts of depression that often leads to debilitating condition. About 80% of older adult have one chronic condition and 50% have at least two. Reliable and sustainable therapeutic approaches to laughter are sound form of complementary medicine for seniors that can help keep them in good health and good cheer. Its exercise are low impact, well tolerated and this unique approach offers a complete methodology that is easily adaptable to all the level of cognitive, sensory and motor abilities.

சமூக பொருளாதார விவரங்கள்

1. வயது (வருடத்தில்)
 - a. 60 -65
 - b. 66 -70
 - c. 70வயதுக்குமேல்
2. மதம்
 - a. இந்து
 - b. கிருஷ்ணுவம்
 - c. முஸ்லிம்
 - d. மற்றவை
3. திருமணவிவரம்
 - a. மணமானவர்
 - b. தனிநபர்
 - c. விவாகரதானவர்
 - d. விதவை
 - e. பிரிந்துவாழ்பவர்
4. கல்விதகுதி
 - a. படிப்பறிவில்லை
 - b. முதல்நிலைக்கல்வி
 - c. உயர்நிலைக்கல்வி
 - d. பட்டப்படிப்பு
5. வேலை
 - a. அரசாங்கவேலை
 - b. தனியார்வேலை.
 - c. மற்றவை
6. வருமானத்திற்கான ஆதரவு
 - a. ஒ. ஏ. பீ நித .
 - b. ஓய்வூதியம் பெறுபவர்

c. வேறுவகையில் பெருதல்

7. குழந்தைகளின் எண்ணிக்கை

a.ஒன்று அல்லது இரண்டு

b.இரண்டுக்குமேல்

c.குழந்தைகள் இல்லை

8. சேர்க்கும் விதம்

a.அறக்கட்டளைகளின் மூலம் சேருதல்

b.சொந்த விருப்பில் சேருதல்

c.குழந்தைகளின் மூலம் சேருதல்

9. பொழுதுபோக்கு

a. தொலைக்காட்சிபார்த்தல்

b. புத்தகம் படித்தல்

c.மற்றவர்களுடன் கலந்துரையாடல்

d. மற்றவை

10. தங்கியிருக்கும் நாட்கள்(வருடத்தில்)

a. ஓராண்டுக்கு குறைவு

b. இரண்டிலிருந்து ஐந்து வருடங்கள்

c.ஐந்துவருடங்களுக்கும் மேல்

SECTION - B

கீழே கொடுக்கப்பட்டு உள்ளவற்றில் தங்களுக்கு ஏற்பட்ட அனுபவங்களை நினைவுகூர்ந்து கீழே குறிக்கப்பட்ட இடத்தில் என குறிக்கவும் ()

தாஸ் அளவுகோல்

வரி சை எண்	கேள்விகள்	ஒருபோ தும் இல்லை (0)	சில நேரங்களி ல்(1)	அடிக்க டி (2)	எப்பொழு தும் (3)
1	முக்கியமில்லாத விஷயங்களுக்கு கூட மனகலக்கம் அடைக்கிறேன்				
2	எனது வாய் வறண்டபோவதாக உணருகிறேன்				
3	நேர்மறை எண்ணங்களை என்னால் நினைக்க முடியவில்லை				
4	சுவாசிதலில் சிரமப்படுவதாக நான் உணருகிறேன்				
5	எதிர்மறை எண்ணங்களை விட்டுவிலகி செல்ல முடியவில்லையே என்ற எண்ணம் ஏற்படுகிறது				
6	சிலதீவ்நிலைகளில் அதிகப்படியாக செயல் படவேண்டும் என்ற எண்ணத்திற்கு ஆட்படுவதாக உணருகிறேன்				
7	எனக்கு உடம்பில் நடுக்கம் ஏற்படுவதாக உணருகிறேன்				
8	இறுக்கமான மனநிலை இல்லிருந்து மீள சிரமப்படுவதாக உணருகிறேன்				
9	மனகலகத்திற்கு உள்ளான செயல்பாடுகளில் அது முடிஉம் போது அதிலிருந்து நான் விடுவிக்கப்பட்டதாக உணருகிறேன்				
10	என்னால் எந்த விசயத்திலும் முன்னேற முடியவில்லை என உணருகிறேன்				

வரி சை எண்	கேள்விகள்	ஒருபோ தும் இல்லை (0)	சில நேரங்களி ல்(1)	அடிக்க டி (2)	எப்பொழு தும் (3)
11	மிக எளிதான செயல்பாடுகளுக்கு கூட நான் அதிகமாக கவலையடைகிறேன்				
12	நான் நரம்பு தளர்ச்சி அடைவதாக உணருகிறேன்				
13	நான் வருத்தம் மற்றும் மனசோர்வு அடைவதாக உணருகிறேன்				
14	தாமதமான செயல்பாடுகளின்போது நான் பொறுமை இழந்து விடுகிறேன்				
15	நான் மயக்கமாவது போல் உணருகிறேன்				
16	எந்த ஒரு செயலிலும் என்னால் ஆர்வம் காட்ட முடியவில்லை				
17	எந்த ஒரு செயலுக்கும் நான் தகுதி அற்றவனாக உணருகிறேன்				
18	நான் அதிக அளவில் கோபப்படுகிறேன்				
19	ஒரு செயலை செய்ய நினைக்கும் போது அது குறித்த அச்ச உணர்வால் உடல் வியர்த்து களைப்பு அடைந்து விடுகிறேன்				
20	நான் காரணமின்றி கவலை கொள்கிறேன்				
21	என் வாழ்க்கை முக்கியத்துவம் வாய்த்ததாக நான்கருதவில்லை				
22	மன கவலை இருந்து மீள சிரமப்படுகிறேன்				
23	மன சோர்வேளேருந்து ஆகவாசப்படுத்தி கொள்ள முடியாத நிலையில் இருக்கிறேன்				
24	இழப்புகளை ஏற்று கொள்ள முடியாத நிலையில் இருக்கிறேன்				
25	கடினமான செயல் இல்லாதபோது கூட அதிகம் இதயம் துடிப்பதாக அல்லது நின்று விடுவதாக				

வரி சை எண்	கேள்விகள்	ஒருபோ தும் இல்லை (0)	சில நேரங்களி ல்(1)	அடிக்க டி (2)	எப்பொழு தும் (3)
	உணருகிறேன்				
26	நான் மனம்வாடிய நிலையிலும்துயரத்துடனும் காணப்படுகிறேன்				
27	நான் மிகவும் எரிசல் அடைவதாக உணருகிறேன்				
28	நான் கட்டுப்படுத்தமுடியாத திடீர் அச்ச உணர்விற்கு ஆளாகிறேன்				
29	கவலைவுற்ற மனநிலையில் இருந்து உடனடியாக அமைதியான மனநிலைக்கு வரமுடியவில்லை				
30	முக்கியத்துவம் இல்லாத செயலை செயும்போது கூட மன கலக்கம் அடைவதாக உணருகிறேன்				
31	என்னால் எந்த விசயங்களிலும் ஆர்வத்துடன் செயல்படமுடியவில்லை				
32	நான் ஈடுபடும் காரியங்களில் வரும் இடையூறுகளை என்னால் பொறுத்துக்கொள்ள முடியவில்லை				
33	நரம்பு இருக்கமடைவதாக உணருகிறேன்				
34	எனக்கு தாழ்வு மனப்பான்மை இருப்பதாக உணருகிறேன்				
35	ஒன்றை இழக்கின்றபோது அதன் இழப்பை என்னால் ஏற்க இயலவில்லை				
36	பெரும் வருத்தம் அடைத்தவனாய் உணருகிறேன்				
37	என் எதிர்காலம் பற்றி எனக்கு நம்பிக்கையில்லை				
38	என் வாழ்க்கை அர்த்தமற்றதாய் தோன்றுகிறது				
39	நான் விரும்புவதை முன்னிறுத்தி				

வரி சை எண்	கேள்விகள்	ஒருபோ தும் இல்லை (0)	சில நேரங்களி ல்(1)	அடிக்க டி (2)	எப்பொழு தும் (3)
	செயல்பட தெரியாதவனாகஉணருகிறேன்				
40	ஏமாற்றம் அடையும் போது நான் மிகவும் கவலைபடுவதாகஉணருகிறேன்				
41	எனக்குள் நடுக்கம் ஏற்படுவதாகஉணருகிறேன்				
42	நான் எந்தஒரு சிக்கலை தீர்ப்பதற்கு மிகவும் சிரமப்படுவதாகஉணருகிறேன்				

ஆராய்ச்சி ஒப்புதல் படிவம்

ஆராய்ச்சியின்தலைப்பு:வயதானவர்களுக்கிடையே சிரிப்பு
பயிற்சியின்மூலம் மன உளைச்சலை குறைக்க முதியோர் இல்லத்தில்

ஆய்வாளர் பெயர்:இ.இளமதி

பங்கேற்பாளரின்பெயர்:

தேதி :

வயது / பாலினம். :

- ஆய்வாளர்மேற்கொள்ளும் பங்கேற்கயாருடையகட்டாயமுமின்றிமு (மூமனதுடனும்சுயநினைவுடனும்சம்மதிக்கிறேன்.
- ஆய்வாளர்மேற்கொள்ள போகும் பரிசோதனைகளை மிக தெளிவாக விளக்கிக்கூறினார்.
- எனக்கு விருப்பமில்லாத பட்சத்தில் ஆராய்ச்சியிலிருந்து எந்நேரமும் விலகிக்கொள்ளலாம் என்பதையும் மூலம்அறிந்துகொண்டேன்.
- இந்தஆராய்ச்சி
ஒப்புதல்கடிதத்தில்உள்ளவிவரங்களைநன்குபுரிந்துகொண்டேன்.எனது உரிமைகள் மற்றும் கடமைகள்ஆய்வாளர் மூலம்விளக்கப்பட்டது.
- நான்ஆராய்சியாளருடன்ஒத்துழைக்கசம்மதிக்கிறேன்.எனக்குஏதேனும் உடல்நலக்குறைவு ஏற்பட்டால் ஆராய்ச்சியாளருடன் தெரிவிப்பேன்.
- நான் வேறுயெந்த ஆராய்ச்சியிலும் தற்சமயம் இடம்பெறவில்லை என்பதை தெரிவித்து கொள்கிறேன்.
- இந்த ஆராய்ச்சியின் தகவல்களை வெளியிட சம்மதிக்கிறேன் . அப்படி வெளியிடும்போது என் அடையாளம் வெளிவராது என்பதை அறிவேன்.
- எனக்கு இந்த ஒப்புதல் கடிதத்தின் நகல் கொடுக்கப்பட்டது

ஆய்வாளர்கையெப்பம்

பங்கேற்பாளரின்கையெப்பம்

தேதி

தேதி

ஆராய்ச்சி தகவல் தாள்

ஆராய்ச்சி தலைப்பு : வயதானவர்களுக்கிடையே சிரிப்பு பயிற்சி

மூலம்மன உளைச்சலை குறைக்க

முதியோர் இல்லத்தில் ஆய்வ

ஆய்வாளர் பெயர் : இ. இளமதி

பங்கேற்பாளர் பெயர் :

தேதி :

வயது/பால் :

ஆய்வாளர் மேற்கொள்ளும் ஆராய்ச்சியில் பங்கேற்க யாருடைய கட்டாயமுமின்றி முழுமனதுடனும் சம்மதிக்கலாம். இதில் பங்கேற்பதன் நோக்கம், இந்த ஆராய்ச்சியில் தகவல்களை தெரிந்து கொள்வதற்காகவும், அதனை பயன்படுத்துவதற்காகவும் மட்டும் தான்.

இந்த ஆராய்ச்சியின் நோக்கம், வயதானவர்களிடையே மன உளைச்சலை குறைக்க சிரிப்பு பயிற்சி பயன்படுத்தும் முறைகளை பற்றி கற்றுத்ருவதாகும்.

ஆராய்ச்சி மேற்கொள்ளும் முறை :

இந்த ஆராய்ச்சியில் வயதானவர்களுக்கிடையே ஆய்வாளர் தயார் செய்த கேள்வி மூலம், சிரிப்பு பயிற்சி பயன்படுத்தும் முறைகளை கற்றுத்தருவதற்கு, முன்பு மற்றும் பின்பு அவருடைய அறிவு திறன் மேம்படுவதை அறியலாம்.

இதனால் ஆய்வாளருக்கான பயன் :

இந்த ஆய்விற்குப்பின் வயதானவர்கள் சிரிப்பு பயிற்சி மூலம் மன உளைச்சலை குறைக்கும் முறைகளை கற்றுத்தந்ததின் தாக்கத்தினை அறியலாம்.

இதனால் பங்கேற்பாளருக்கான பயன்:

இந்த ஆய்வுமன உளைச்சலயால் ஏற்ப்படும் பின்விளைவுகளை தவிர்க்கவும், அவரின் அறிவு திறனை மேம்படுத்த பயன்படுகின்றது.

ஆராய்ச்சியில் பங்கேற்கவில்லை என்றாலும், உங்களின் சராசரி வாழ்க்கைமுறை, மருத்துவரின் ஆலோசனை மற்றும் சிகிச்சை முறையில் எந்த வித மாற்றமும் ஏற்படாது என்பதனை தெரிவிக்கிறேன்.

இந்த ஆராய்ச்சியில் பங்கேற்க விருப்பம் இல்லை என்றால் உங்களின் முழுமனதுடன் நீங்கள் இந்த ஆராய்ச்சியிலிருந்து விலகிக்கொள்ளலாம் என்பதை தெரிவிக்கிறேன்.

இந்த ஆராய்ச்சியில் உங்களின் மருத்துவத்தகவல்களை பாதுகாப்பாக வைத்துக்கொள்கிறேன் என்பதை தெரிவிக்கிறேன்.

ஆய்வாளர் கையொப்பம்

பங்கேற்பாளர் கையொப்பம்

தேதி

தேதி

STEPS OF LAUGHTER THERAPY

DEEP BREATHING EXERCISE



RHYTHMIC CLAPPING AND WARM-UP EXERCISES



HO-HO-HA-HA-HA CHANTING



GREETING LAUGHTER



HOT SOUP LAUGHTER



ONE METER LAUGHTER



LION LAUGHTER



PLAYFUL LAUGHTER TECHNIQUE



CLOSING TECHNIQUE



சென்னை மருத்துவ கல்லூரி
செவிலியர் கல்லூரி
சென்னை -3.

வயதானவர்களின் மன உளைச்சலை குறைப்பதில் சிரிப்பு
பயிற்சியின் முக்கியத்துவம் பற்றிய மனநல தகவல் கையேடு



ஆய்வாளர்

இ.இளமதி
முதுகலை செவிலியர் மாணவி
இரண்டாம் ஆண்டு
செவிலியர் கல்லூரி
சென்னை மருத்துவ கல்லூரி
சென்னை -3.

சிரிப்பு பயிற்சியின் நுணுக்கங்கள்

வணக்கம்

நான் என்னுடைய எம்.எஸ்.சி (செவிலியர்) படிப்பில் மனநல செவிலியர் பிரிவில் தற்போது திட்ட ஆராய்ச்சி செய்து கொண்டிருக்கிறேன். என்னுடைய ஆராய்ச்சி "சிரிப்பு பயிற்சி முதியோர் இல்லத்தில் உள்ள வயதானவர்களிடம் மன உளைச்சலை எவ்வாறு குறைக்கிறது" என்பது பற்றியதாகும்.

நான் இன்று சிரிப்பு பயிற்சியால் ஏற்படும் நன்மைகள் பற்றி உங்களுக்கு விரிவாக எடுத்துரைக்க போகிறேன். இதில் கலந்து கொள்வதன் மூலம் உங்களுக்கு நிறைய நன்மைகள் ஏற்படும் என்பதால் உங்களுடைய முழு ஒத்துழைப்பை நல்குமாறு அன்புடன் கேட்டுக் கொள்கிறேன்.

சிரிப்பு பயிற்சியின் முன்னுரை :

ஒரு குறிப்பிட்ட சிரிப்பு பயிற்சி பகுதியில் பல்வேறு ஊக்குவிக்கப்பட சிரிப்பு பயிற்சி நுணுக்கங்கள் அடங்கியுள்ளன. அவை மூச்சு பயிற்சி, உடற்பயிற்சி ஆகும். சிரிப்பை தூண்டி விடுவதில் முக்கிய பங்கு வகிப்பது நேரடி கண் தொடர்பே ஆகும். அதில் கலந்து கொள்பவர்கள் அனைவரும் ஒருவர் முகத்தை ஒருவர் பார்த்து கொண்டே பயிற்சிகள் செய்வது, சிரிப்பை வரவைக்கும் ஒரு யுக்தியாகும். ஒரு சிரிப்பு கால பகுதி என்பது 45 முதல் 50 நிமிடங்கள் கொண்ட கால அளவாகும்.

சிரிப்பு பயிற்சியின் விளக்கம்: :

சிரிப்பு பயிற்சி என்பது சிரிப்பை பயன்படுத்தி மனவளத்தை ஊக்குவித்து உடல் நலத்தை மேம்படுத்துவதாகும்.

சிரிப்பு பயிற்சி ஏற்கத்தக்கவர்கள் :

- ❖ உடல் மற்றும் மன உளைச்சல்
- ❖ உயர் இரத்த அழுத்தம்
- ❖ இதய நோய்கள்
- ❖ நீரிழிவு நோய்
- ❖ மன அழுத்தம்
- ❖ ஒவ்வாமை
- ❖ ஆஸ்துமா
- ❖ முதுகுவலி
- ❖ நுரையீரல் நோய்கள்



- ❖ தலைவலி
- ❖ மாதவிடாய் கோளாறுகள்

சிரிப்பு பயிற்சி ஏற்கத்தகாதவர்கள்:

- ❖ அறுவை சிகிச்சை செய்தவர்கள்
- ❖ கண் அறுவை சிகிச்சை
- ❖ மூலநோய்
- ❖ கர்பிணிகள்



சிரிப்பு பயிற்சியின் பயன்கள் :

- ❖ விலையில்லாத, குறைந்த நேர அவகாசம் மட்டுமே தேவைப்படுவது
- ❖ மன உளைச்சலை குறைக்க கூடியது
- ❖ எளிதாக செய்ய கூடியது

சிரிப்பு பயிற்சியின் வகைகள் :

பொதுவாக சிரிப்பு பயிற்சியில் 50 உள்ளன. அவற்றை கீழ்க்கண்டவாறு வகைப்படுத்தலாம் .

- அடிப்படை சிரிப்பு :

இந்த வகை சிரிப்பு தினசரி வாழ்கையில் நாம் அனைவரும் சிரிக்கும் சிரிப்புகள் ஆகும்.

- புத்துணர்ச்சி சிரிப்பு :

இந்த வகை சிரிப்பு குறைந்த சத்தத்துடன் ஆரம்பித்து, படிப்படியாக சத்தத்தை அதிகரித்து கொண்டே கைகளை உயர்த்தி உற்சாகத்தை அதிகப்படுத்துவதாகும். ஹோ-ஹோ-ஹா- ஹா- ஹா" போன்ற அர்த்தமற்ற சிரிப்புகள் இந்த வகையை சேர்ந்ததாகும்.

- தன்னிச்சையான சிரிப்பு
- அலுவலக சிரிப்பு
- கோமாளி சிரிப்பு
- சமஸ்கார சிரிப்பு
- திருவிழாசிரிப்பு (அல்லது) அகங்கார சிரிப்பு
- சமூக சிரிப்பு



சிரிப்பு பயிற்சியின் படிகள் :

1. ஆழ்ந்த மூச்சு பயிற்சி
2. ஒத்திசைவாக கைதட்டுதல் மற்றும் உற்சாக பயிற்சி
3. ஹோ ஹோ ஹா ஹா ஹா போன்ற அர்த்தமற்ற சிரிப்பு
4. சிரிப்பு பயிற்சிகள்
 - யோகாசன சிரிப்பு பயிற்சி
 - விளையாட்டுத்தன சிரிப்பு பயிற்சி
 - நன்னடத்தை சிரிப்பு பயிற்சி
5. விளையாட்டுத்தன சிரிப்பு நுணுக்கங்கள்
6. நிறைவு செய்தல் நுணுக்கங்கள்

1. ஆழ்ந்த மூச்சு பயிற்சி:

ஆழ்ந்த மூச்சு பயிற்சி சிரிப்பு பயிற்சியின் ஒரு படியாகும். இது நுரையீரலை தூண்டி உடல் மற்றும் மனவளத்தை ஊக்குவிக்கிறது. இதனை நின்று கொண்டோ அல்லது முன்பக்கம் குனிந்து கொண்டோ செய்யலாம். உறுப்பினர்கள் கைகளை மேல்பக்கமாக நீட்டி, மூக்கின் வழியாக ஆழ்ந்த மூச்சினை உள்ளிழுக்க வேண்டும். 4-5 வினாடிகள் அப்படியே இருக்க வேண்டும். பின்பு மெதுவாக வாயின் வழியாக மூச்சினை விடவேண்டும். இப்பயிற்சி நுரையீரலில் காற்றின் அடர்த்தியை அதிகரிக்க செய்து சிரிப்பை உருவாக்குவதில் உதவி செய்கிறது.



2. ஒத்திசைவாக கைதட்டுதல் மற்றும் உற்சாக பயிற்சி:

கைகளை நேராக நீட்டி, உள்ளங்கைகளும் விரல்களும் ஒன்றுடன் ஒன்று படுப்படி ஒத்திசைவாக தட்ட வேண்டும். இப்பயிற்சி உள்ளங்கைகளில் உள்ள அக்குபஞ்சர் புள்ளிகளை தூண்டி ஒருவிதமான உற்சாகத்தையும், ஆற்றலையும் தருகின்றது. பின்பு அனைவரும் சேர்ந்து 1-2, 1-2-3 என்று ஒத்திசைவாக தட்ட வேண்டும்.



3. ஹோ-ஹோ-ஹா-ஹா-ஹா போன்ற அர்த்தமற்ற சிரிப்பு:

இதனை ஒத்திசைவாக கைதட்டிக் கொண்டோ அல்லது கை தட்டாமல் ஒத்திசைவாக கை வீசிக்கொண்டே செய்யலாம். இது யோகாசன இயக்கு மூச்சு பயிற்சியை அடிப்படையாக கொண்டது. ஒவ்வொருவருக்கும் இப்பயிற்சியில் கலந்து கொள்வது எளிது. ஆகையால் அனைவரும் கலந்து கொண்டு பயன் பெறலாம்.

Ho. Ho.
Ha! Ha! Ha!



3. சிரிப்பு பயிற்சிகள் நுணுக்கங்கள்

இதனை 3 வகைகளாக பிரிக்கலாம்.

1. யோகாசன சிரிப்பு பயிற்சி
2. விளையாட்டுத்தன சிரிப்பு பயிற்சி
3. நல்லொழுக்கசிரிப்புபயிற்சி

யோகாசன சிரிப்பு பயிற்சி:

இதில் சில வகைகள் யோகாசன மூச்சு பயிற்சியையும், சில வகைகள் யோகாசன உடல் பயிற்சியையும் (பிரணாயாம) அடிப்படையாகக் கொண்டது. (எ-கா) சிங்க கர்ஜனை சிரிப்பு



விளையாட்டுத்தன சிரிப்பு பயிற்சி

இந்த வகை நடிப்பு மனநிலையை மாற்றி, உறுப்பினர்களிடையே விளையாட்டை அதிகரித்து வெட்கத்தை குறைத்து ஒரு நெருக்கமான நட்புறவை அதிகரிக்க செய்கிறது. ஒருவரின் ஆக்க திறனையும், கற்பனை திறனையும் அதிகரிக்கிறது. (எ-கா) மீட்டர் சிரிப்பு,, பால்வண்ண சிரிப்பு, தொலைபேசி சிரிப்பு



நல்லொழுக்க சிரிப்பு பயிற்சி :

சிரிக்கும் போதே பிரத்யேகமான உடல் அசைவுகள் மூலம், ஆழ்நிலை மனநிலையை தூண்டல் மூலமாக நன்னடத்தை விளைவுகளை உருவாக்க இயலும்.

(எ-கா)பாராட்டு சிரிப்பு, கைகுலுக்கல் சிரிப்பு, மன்னித்தல் சிரிப்பு, வாழ்த்து சிரிப்பு.



5. விளையாட்டுத்தன சிரிப்பு நுணுக்கங்கள்

உறுப்பினர்கள் அனைவரும் மிக நல்லது, மிக நல்லது என்று சொல்லி கொண்டே கைகளை தட்ட வேண்டும். இது புத்துணர்வு ஊட்டி, ஆற்றலை மேம்படுத்துகிறது.



6. நிறைவு செய்தல் நுணுக்கங்கள் :

முடிவில் 3 ஸ்லோகங்களை உறுதிமொழிகளாக சொல்லி சிரிப்பு பயிற்சியை நிறைவு செய்தல் வேண்டும்.

1. நாங்கள்தான் உலகிலேயே இனிமையானவர்கள். அனைவரும் ஆம், ஆம் என்று சொல்ல வேண்டும்.
2. நாங்கள்தான் உலகிலேயே ஆரோக்கியமானவர்கள். அனைவரும் ஆம், ஆம் என்று சொல்ல வேண்டும்.
3. நாங்கள் அனைவரும் சிரிப்பு குழுவின் உறுப்பினர்கள். அனைவரும் ஆம், ஆம் என்று சொல்ல வேண்டும்.

இந்த உறுதிமொழிகளை ஏற்றபின் அனைவரும் கைகளை வனத்தை நோக்கி நீட்டி, கண்களை மூடிக் கொண்டு 30-60 வினாடிகள் அமைதி வேண்டி மௌனம் காக்க வேண்டும். ஆகையால் சிரிப்பின் மூலமாக வாழும் கலையை கற்று கொள்கிறேன்.



மன உளைச்சலில் சிரிப்பு பயிற்சியின் முக்கியத்துவம் :

நமது அன்றாட வாழ்க்கையில் சிரித்தல் நம் மன உளைச்சலை குறைப்பதில் முக்கிய பங்கு வகிக்கிறது. சிரிக்கும் போது உடல் தசைகள் தூண்டுவதுடன், என்டோர்பின் என்ற சுரப்பியும் சுரக்கிறது. நமது உடலால் உண்மை சிரிப்பையும், போலி சிரிப்பையும் பிரித்து பார்க்க முடியாது. அதனால் சிரிப்பு உடலில் பல நன்மைகளை உருவாக்குகிறது.

முடிவுரை:

சிரிப்பு மனிதனுக்குரிய உணர்ச்சியின் வெளிப்பாடு. சிரிப்புப் பயிற்சியைப் பயன்படுத்தி வயதானவர்களிடையே மன உளைச்சலை எவ்வாறு குறைக்கலாம். என்பதைப் பற்றி தெரிந்து கொண்டோம். இதன் மூலம் மன உளைச்சல் மற்றும் உடல்சோர்வை குறைத்து வயதானவர்களுக்கு ஒரு ஆரோக்கியமான சூழ்நிலையை வழங்கலாம் என்பது எனது ஆய்வின் முடிவாகும்

நன்றி

